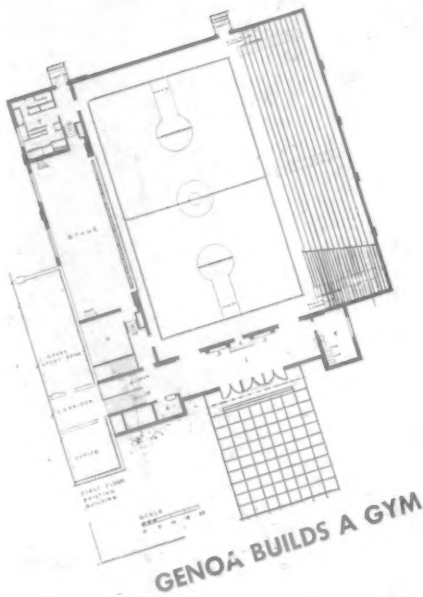


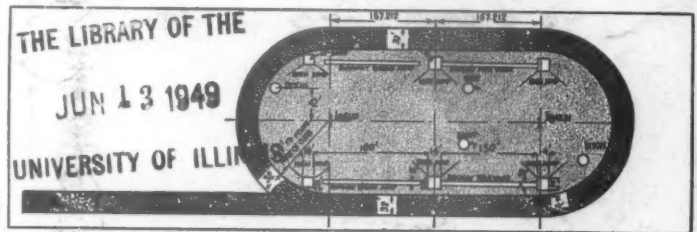
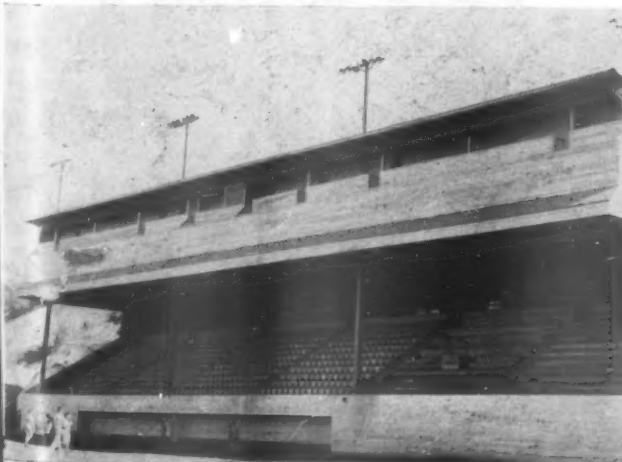
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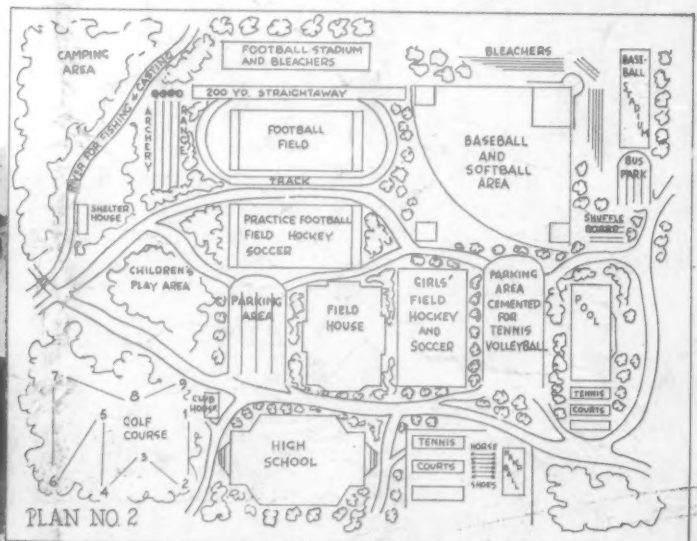


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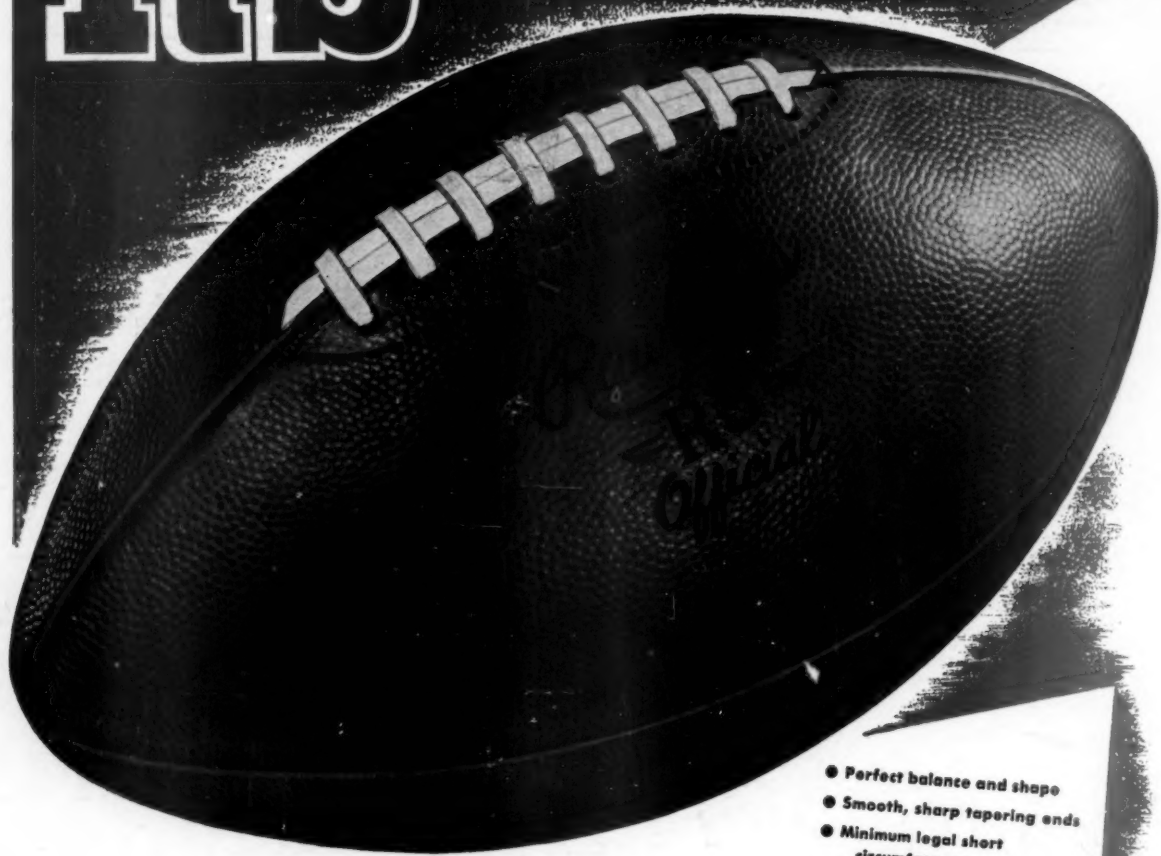


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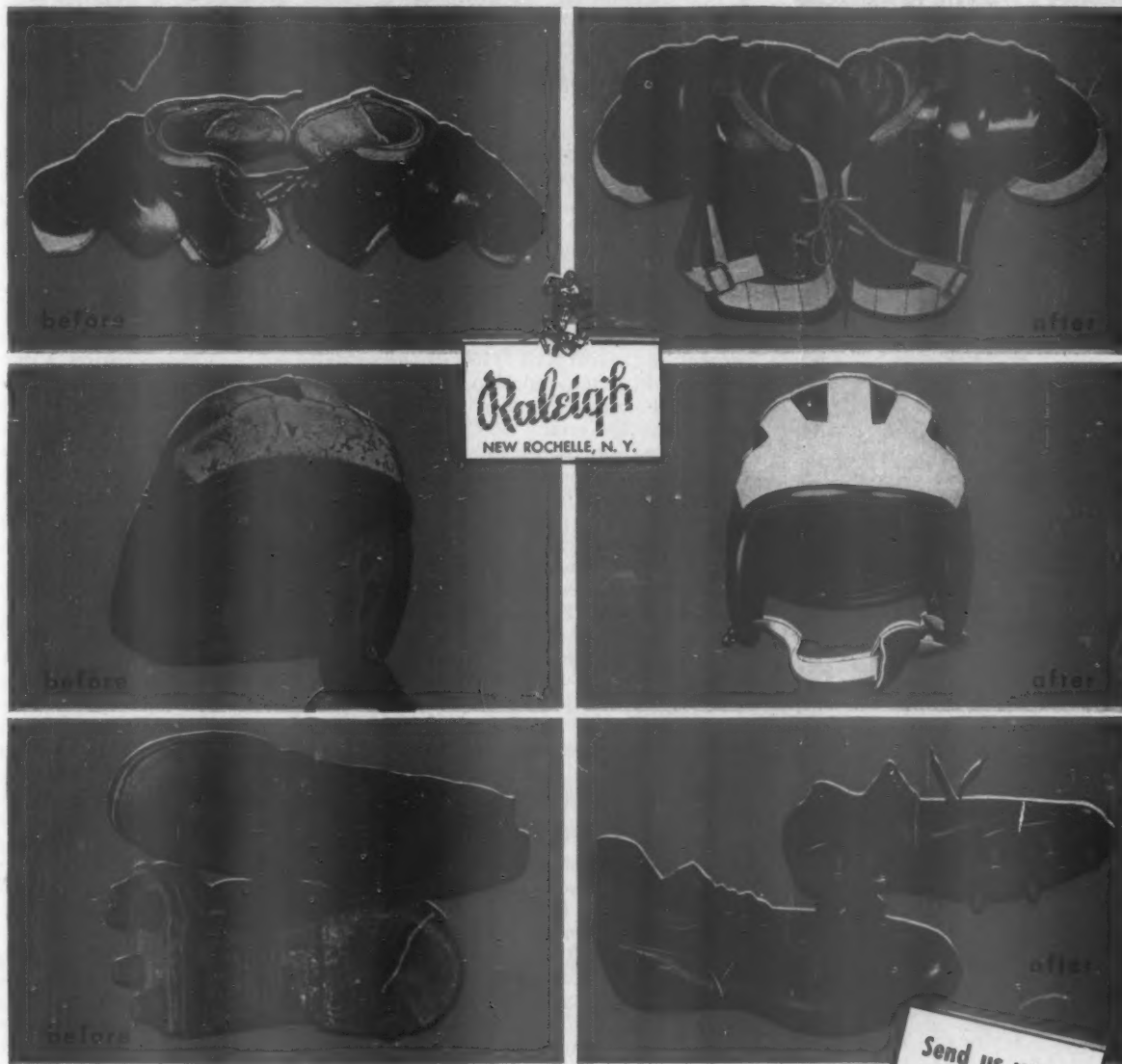
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**FRONT COVER ILLUSTRATION**

Illustrations of four new athletic plants coupled  
 with articles about these structures sets the motif for  
 the June issue. Henceforth each June issue will be de-  
 voted in part to an examination of new athletic facil-  
 ities. It is hoped that these articles will be of help to  
 schools planning to expand along this line.



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**T**HE 1949 University of Arizona football team will be directed by one of the youngest coaching staffs in the nation. Headed by Bob Winslow, undertaking his first head coaching job, members of the Wildcat coaching staff average thirty-one years of age. Carl Mulleneaux will serve as chief assistant and line coach; Ned Mathews will be backfield coach and Don Vosberg will continue as end coach. Winslow entered the University of California in 1937 as a sophomore and won three letters in both football and baseball. He was named to the All-Pacific Coast Conference team in 1937 and 1938 and his senior year earned second team All-American recognition. Notre Dame twice named him on its all-opponent team. He played on two U. S. C. Rose Bowl teams, those which won over Duke in 1939 and Tennessee in 1940, and in the 1940 All-Star game. Following graduation he played with the Detroit Lions and Brooklyn. In 1945 he became assistant coach to Jeff Cravath at U. S. C. He also coached for the Detroit Lions before taking over his present job . . . Gilbert Wilson, who won the Iowa state basketball tournament two years ago, has been signed as basketball coach at DeKalb Teachers College . . . Lou Zarza has been made head football coach at Wayne University and has named Sam Ketchman, formerly coach at East Lansing, Michigan, High School, as his assistant . . . A recent survey shows that high school boxing has declined in Wisconsin during the last few years. Only twenty-five schools competed on an interscholastic basis during the 1943 season. In 1948, forty-five schools participated and in 1947 there were fifty-one. In 1946, fifty-eight participated and back in 1941 there were 122.

**M**IKE KERNS, former Penn State College athlete, is now coaching football at West Catholic High School in Philadelphia . . . The University of Arizona has taken the Border Conference tennis title in each of the eight years it has been awarded. The years are 1938 to 1942, and 1946 to 1948.

**L**IEUTENANT Glenn Davis and Lieutenant Ed Rafalko, former Army football stars, have been assigned to West Point as assistant football coaches . . . Dominick "Tim" Montero, who has been coaching at St. James Catholic School in Chester, Pennsylvania, has been named football coach at Washington College in Maryland . . . Ben Tentson, a member of the coaching staff at the University of Wyoming, will become varsity basketball coach at North Dakota Agricultural College . . . Bradley University is building a \$300,000 fieldhouse which will be ready for Bradley's opening basketball game in December . . . Loren Page of Wayne, Nebraska, has been appointed coach of football, basketball and track at Bloomfield, Iowa, High School . . . Charles Hess, Midland College basketball and track star, will be the new basketball coach at Shelby, Iowa, Consolidated High School . . . Edgar Howe, a graduate of Iowa Teachers, has been made basketball and baseball coach at Elk Horn, Iowa, High School. He succeeds Carl Kent, who resigned . . . Merlin Eikenberry, former coach at Oakwood High School in Dayton, Ohio, has been named head basketball and baseball coach at Denison University . . . A. G. Francis, who has been director of athletics at Lancaster, Ohio, High School, is now holding a similar position at Toledo University . . . Harvard University has named Norman Shepard as basketball coach. He was formerly athletic director and basketball coach at Davidson College. He succeeds Bill Barclay who resigned . . . Bill Simon, who has been junior varsity football coach at Syracuse University, will take over the same position for Herman Hickman at Yale . . . Dave Scobey, baseball and basketball star at Vanderbilt in 1943, served as baseball coach at his alma mater this spring . . . William "Bill" Joyce, who is in his thirtieth year at Lynn, Massachusetts, Classical High School, has been named director of athletics. Arthur Rogers will assume Joyce's former job as track coach.

(Continued on page 50)

# WITH THE STARS OF TENNIS



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JACK KRAMER

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# Line Play

By ROBERT G. TROCOLOR

Football Coach, John B. Stetson University

THE BASIS of any lineman's work begins with his original position whether he is on offense or defense, that is, the lineman's "stance". No matter what the position or the job to be done, whether it is a guard's pulling out, a tackle's shoulder block, or a center withstanding a head-on charge, all depend upon the lineman's ability to have himself set in a balanced, durable, and wide-vised stance.

Upon approaching the line of scrimmage, the lineman's first step should be to look at his feet so that they are properly placed. The center should have his feet at a distance apart which will allow him to keep his body low with ample balance to have a moderate recoil both frontwards and backwards without moving his feet. Most centers prefer to place one foot back of the other about six inches. The head should be up and neck bulled with the eyes looking straight ahead. Guards should place their feet a comfortable distance apart. This distance is usually equal to or slightly wider than the person's shoulders. To place himself correctly in a stance that will stand up under an opposing guard's charge and yet offer a fast, balanced charge itself, the guard, after checking on the position of his feet to see that they are placed properly, should take a squatting position. Next, he should raise his body very slightly to make a slight arch and extend his arm, placing his hand directly in front of his knee. Very little pressure should be applied to this arm. The other arm is placed on the knee (the forearm resting on the knee). Placing one foot back further than the other is advisable to add speed to a pull-out or charge but the important thing is that the feet be placed in an identical position on every play so as not to reveal the direction of the play. The same stance should be applied to the tackle position. From these stances any type of block may be thrown.

### Blocking

Two of the most important things in making an effective block are (1) to make fast and secure contact so

one is in a strong position from which to operate and (2) to stay on the feet and to keep driving.

A blocker cannot do his job unless both of these are accomplished. To make a fast start the blocker should move with the snap of the ball. His steps should be short and powerful. For strong contact the first step should be directed at the center of the opposing player's stance. His shoulder should hit the player's mid-section with his head kept up and looking forward. The next steps are determined by the direction in which the player is to be driven. The legs should be kept under the body and at a fairly generous distance apart. They should always be driving.

### Study the Opponent

The opponent should be studied. Many times on single or post blocking, if the opponent is faking or angle-floating, the best type of block is as follows: The step is taken as usual but the player should be hit high on his thigh. This is at the time when he is most likely to move. Instead of driving the next step is to slide off on a side block, moving on the hands and feet, getting the leg in back of the opponent's knee joint. He cannot move away from the block and there is no holding. When blocking, always keep the eyes on the man's stomach. This will prevent the blocker from falling for fakes which the opponent will make with his arms, head or legs. The opponent's stomach is the target. The blocker should keep off his knees.

(Continued on page 40)

**ROBERT G. TROCOLOR** played football, basketball and baseball at the University of Alabama and at Long Island University. At Alabama he was on the Southeastern Conference championship basketball team that went to the Rose Bowl. In 1940 he played professional football with the Brooklyn Dodgers. He was signed by the St. Louis Cardinals as a pitcher for Allentown, Pennsylvania. Later he became a scout for the New York Giants and is now in charge of their tryout camps in the Polo Grounds. In seven years of coaching he has better than a .850 win average.



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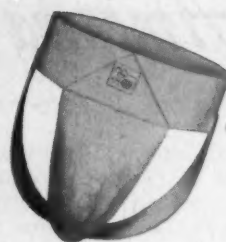
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THE ATHLETIC JOURNAL

**T**HE ABILITY of the high school coach must be such as to enable him to size up the capabilities of the material at his disposal. The matter of individual adjustment to the player must always be kept in mind while teaching various techniques.

Teaching the inexperienced lineman the offensive fundamentals involving stance, ducking the body, quickness-of-contact, and sustained drive is probably the most time-consuming factor in coaching the school-boy football player. Getting youngsters to assume a correct stance, a stance from which they can best carry out other fundamentals, may well involve the major part of the pre-season training period. Inexperienced school-boy linemen are quick to disregard the proper stance and attempt to carry out the fundamentals of a quick, powerful lunge from any position that they happen to assume on the pre-snap lineup.

In directing this article to the high school coaches who are chiefly confronted with the problems of instructing green and inexperienced linemen, I feel that the average lineman should be content with mastering two fundamental blocks for use in charging and running interference. The other blocks which develop from these, such as the reverse, hip, knee,



given special consideration. It follows that linemen today must be fast, clever, and intelligent as well as aggressive, pugnacious, courageous, and must possess a certain amount of viciousness.

# Teaching the Inexperienced Lineman

and others, will come naturally after these two fundamental blocks are mastered.

Present-day football has progressed so rapidly with its changing and shifting defenses, the tricky T formation, and other equally successful systems, that the individual positions, and their relation to each other to insure a smooth-functioning line, must be

## Lineman

By ARCH STEEL

Football Coach

Lincoln Park, Michigan, High School

In the parlance of football it is often said that the game is won "up front". It goes without saying that the team with the more powerful and better coached line generally wins the game.

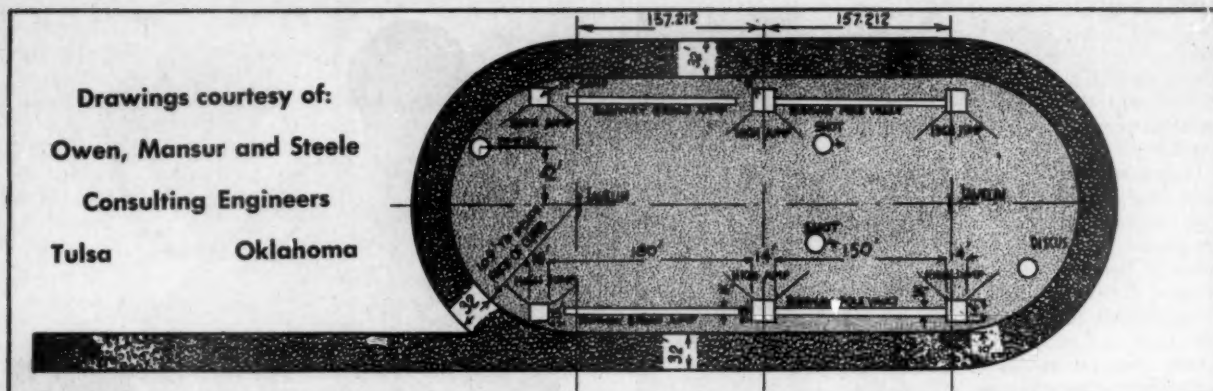
At Lincoln Park we begin by informing all potential line candidates that a lineman who does not develop

(Continued on page 42)





Drawings courtesy of:  
Owen, Mansur and Steele  
Consulting Engineers  
Tulsa Oklahoma



**E**NLARGEMENT of the stadium at the University of Oklahoma made it necessary to take out the old cinder track. A new one is being built across the street by the Charles M. Dunning Construction Company, Oklahoma City, Oklahoma, and is being engineered by Owen, Mansur and Steele of Tulsa, Oklahoma. It was approved by Walter W. Kraft, Director of Physical Plant at the University of Oklahoma, and by President George Cross and the Board of Regents.

It is an east-west track with a 220-

There are three field event pits on each side, each 14 by 16 feet with runways 150 feet long running from both directions. The high jump may be held in various places, but there will be only one fan-shaped cinder approach.

#### Starting and Finishing Marks

The track is built with a 110-foot radius. The start and finish of the various distances are marked on the curb with bronze plates, raised letters and numbers, to run either the

places are counted and only six lanes are available to compete in, there is always a chance that some qualifier may be injured and the points not contested for, or that a contestant may walk in for points.

A background of evergreens will be placed inside the fence and just behind the start of races out of the chute. A plan not yet agreed on is to build the stadium at a slight diagonal so the crowd can see more plainly and so there will be no advantage to standing up to see the finish of the races. The flag pole

# University of Oklahoma's New Track Stadium

By JOHN JACOBS

Track Coach, University of Oklahoma

yard straightaway starting at the west end. There are no optical illusions as it is built on an area which is practically level. It will be 32 feet wide all the way, giving nine forty-two inch lanes all around the oval as well as down the straightaway. There is to be a small concrete stadium on the south side of the straightaway and centered on the finish line. An eight-foot fence will surround the main field with a four-foot fence enclosing the straightaway, just outside of the curb. Press, radio and public address facilities are on the ground level just inside the four-foot fence and in front of the stadium. The eight-foot fence will be landscaped to aid as a windbreak, as there is always a wind suction around tall buildings or stadiums.

straightaway or the curve.

The shot put layout is set up 35 feet from the curb and out on the field in front of the stadium. The javelin is to be thrown down the center of the infield, while discus circles are on the northwest and southeast corners of the infield.

We do not plan to have the contestants face the sun in any event. We believe triangular meets afford better contests in each event for the spectators, and, as there are so few Saturdays in the spring season, those meets will be tried here. The nine full lanes will cut down preliminaries, allow a team to qualify more men and will leave plenty of room to add an additional contestant in case of a possible tie for some place in the preliminaries. In meets where six

will be 15 feet in from the inside curb at the west end of the oval.

We expect to have a permanent public address system with radio and record player connections, which might be used during any lull in the meet and possibly during varsity and freshman practice. It is not easy to get college bands together for every track meet, and the modern generation can't seem to eat, sleep, study, play or work without the radio on. I believe there are records which aid the boys while running the longer races, and also some that hinder them.

#### Track Has Tile Drains

The real construction of the track started by excavating 29 inches deep



down the center and 18 inches deep on each side. It slopes to the center where there is an eight-inch tile drain and cross-drains all the way around. There is similar drainage for all pits, runways and weight circles.

The drainage at the base empties into a 30-inch line which has a one per-cent fall to the bottom of a creek 200 yards away. All the tile is open at each joint except for being tied at the bottom with cement. The joints are covered with burlap and the ditches filled with filter material. When the burlap rots away, the chat will be set to prevent any silt from going in.

There are drainage vents every 30 feet around the curb to take care of surface water from the track. Manholes and storm sewer drains are walled with brick and are large enough to work in if cleaning out is necessary.

The judges' stand will be on the infield. Timers will sit in the stadium.

Just outside of the outside curb is a two-inch water line with seven outlets; one at the end of the straightaway, one on each end of the oval and two on each side of the oval. The hose and hydrant will be in a sunken galvanized iron pit with a locked top.

#### Material In Track Bed

Every layer is rolled to grade with a pneumatic roller. The rough fill is of 2½-inch limestone and about 18 inches deep in the center of the track. It was furnished by Dolese Brothers, Oklahoma City. Next is a six-inch layer of cinders graduated from pea size to walnut. The top three inches is 80 per cent head and cinder and 20 per cent dry clay and loam, ground together before being

put on after screening the cinders through a ¼-inch mesh. This was furnished by H. C. Vanaveer, Strawn, Texas.

There should not be any silt or soft spots on the inside lane as the top is level and comes to within two inches of the top of the curb. The concrete curb is six inches wide at the top, ten inches wide at the bottom and 29 inches deep with beveled edges at the top. The curbs are perpendicular on the inside and battered on the outside. Expansion joints are located every 100 feet and contraction joints every 20 feet. All metal markers are set in the concrete curb with two set screws.

The infield is disced and graded with the center turtle-backed 12 inches higher than the sides and sodded with Bermuda grass. All runways are built the same as the track with the sides lined with treated wood.

#### Movable Shot and Discus Circles

The pits are not outlined with anything and are filled with building sand. The pole vault and high jump pits are topped with cottonwood sawdust and shavings. The shot and discus circles are ringed with white iron bands two inches wide. They are hinged in the center and may be moved to any place on the field, if necessary. The bands have sharpened bolts welded to them on the bottom side.

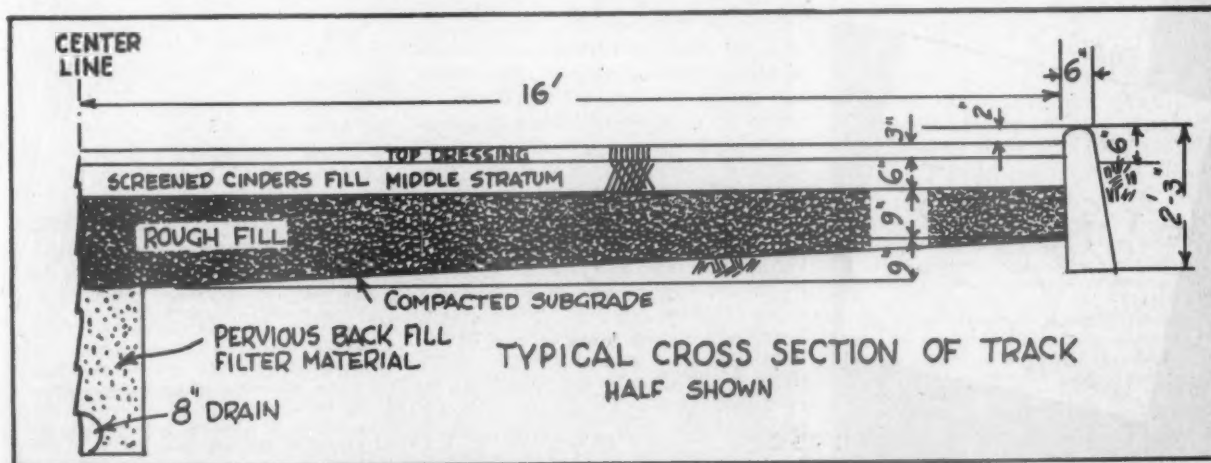
The permanent shot and discus circles and one high-jump approach will be made of asphalt, sand and cinder dust mixed to suit the climate here. It did not seem practical to use all the material from the old track, as it is needed in other projects on the campus.

The construction and engineering

of the whole project is far superior to anything I could vision from studying the blueprints. By studying the plans of other tracks, seeing some of them and asking other coaches what they would change about their own layouts, I learned many valuable things which we tried to incorporate into our track. We are indebted to many different coaches. Their information was appreciated very much.

If we were starting from scratch, my dream track would be one like I have described here but without a straightaway and located inside a football bowl for then anything could be held from a county meet to the Olympic Games. We are not located in the center of a population here that would justify this, however, and I can think of many advantages to both football and track by having separate layouts. Fifty-five thousand people can't see my two-mile team get beat between halves in the fall, for one.

*Oklahoma's new track is being constructed at a cost of about \$50,000. What Mr. Jacobs modestly neglected to mention is that the track has been designed by him. Many improvements make it probably the most practical and modern in the country. Among these the track will be rounder and therefore faster. It will be nine lanes wide all around instead of six lanes. The straightaway will also be nine lanes wide. Drainage facilities will be much improved. Work was begun in March and is expected to be completed before this issue is mailed.* —Ed.

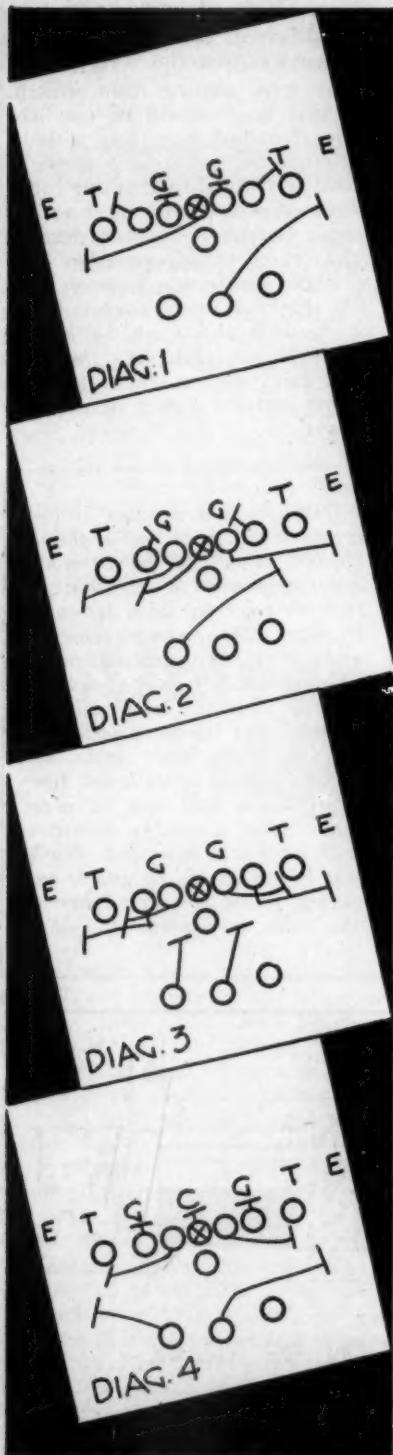


# Building a PASS PATTERN

By DUKE GREENICH

Football Coach, Cocoa, Florida,

High School

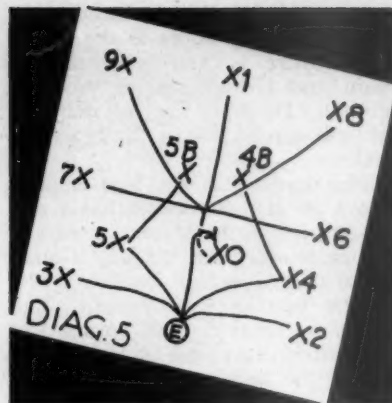


FROM THE TIME that Notre Dame beat a supposedly superior Army team with the Dorais to Rockne combination, the passing attack in football has become a must in all football offenses. Mediocore teams have risen to the occasion and beaten teams rated many points better by playing a stubborn defensive game and then using one pass pattern to score a touchdown and win the game. Charley Conerly pitched the University of Mississippi to its first Southeastern Conference Championship. The name Don Hutson is linked with such names as Dixie Howell, Arnie Huber, and Cecil Isbell. In some cases it is the pass-receiver who makes the passer while in others it is the passer who makes the pass-receiver.

Whatever the case, the passer should be able to spot the possible receiver and fire the ball to the open man instantly. The passer must look over his available receivers quickly and decide who is open, or will be, by the time the ball reaches his hands. Many players are good in picking out receivers but are weak in getting the ball to the receiver. Other boys are excellent passers and can "thread a needle" at fifty yards but they cannot spot their receivers or the proper one to throw to.

Players can, to a certain degree, be trained to be better-than-average passers and receivers. Proper drills can develop some players to be excellent in a specific phase of the passing game. Having passers throw to one another and receivers practice running, feinting, faking, and cutting for five minutes every day will pay off in surprising and rapid results.

Every coach has between five and fifteen pass patterns he uses in an entire season. Scouts can give exact detailed descriptions of the patterns. A defensive man has three alternatives on defense: zone defense, man-for-man defense, and a combination of the two. By using scout reports, however, the defense can be ready for any patterns that may be thrown in a game by seeing them and covering



them many times in practice.

Simplicity is the goal we are all striving for, yet we want a good general coverage. In the case of pass patterns we want enough to cover all types of pass defense but not so many that the players will forget them. Having enough and being able to execute them is better than having more than enough and not being able to execute any.

Blocking for pass protection can be accomplished by using the S A M B O series such as: guards on guards, tackles on tackles, center on one end with a backfield man on the other end (Diagram 1).

Another method is switch- or cross-blocking such as: Guard on tackle or end, tackle on guard or end, and back on end, tackle, or guard (Diagrams 2, 3, and 4).

Of course it is agreed that a passer must have protection in order to spot his receiver. The next phase, after establishing adequate protection for the passer is the pattern and the number of receivers going out. First, the patterns of the ends must be established. Both ends run the same patterns, twelve in all (or as many as are desired). Either end cutting out to the left are odd numbered plays whereas cutting out to the right are even numbered. Zero, is a stop or

(Continued on page 45)

**D**UKE GREENICH played varsity football, basketball and baseball at the University of Mississippi before graduating in 1943. He played with the Chicago Bears in 1944 until a knee injury forced him to retire. He coached at Home Military School, Woodstock, Illinois and at Jonesville, Michigan before going to his present post. An article by Mr. Greenwich on blocking fundamentals appeared in the May issue.

# Coos Bay Athletic Stadium

By WILLIAM BORCHER

and

HARRISON HORNISH



**A**N ATHLETIC stadium known as "the finest in Oregon" overlooks the Marshfield High School football field in Coos Bay and is a monument to community co-operation.

The new stadium, with its seating capacity of over 3000, is a far cry from the situation a few years ago when mud and rain and lack of seating facilities threatened, but did not quite quell, the spirit of athletic rivalry in the southwestern Oregon community.

When first completed, Marshfield Senior High had inadequate athletic facilities. Finished in 1939 with the help of the PWA and a bond issue, the school had no spectator seating facilities for football or track. This was extremely undesirable, particularly for a community where practically every citizen was well posted on the prep athletic situation.

Football games were played on Golden Field, where inadequate drainage resulted in mire and where the seats were nearly in a shambles. When the new school was built in 1940 a track was constructed in a valley directly below the new gymnasium. The school board had earmarked \$30,000 to build a "suitable grandstand" but that was before the war and the rapid rise in building costs. As soon as regulations permitted, the project was investigated for the board by Superintendent Leonard B. Mayfield, and it was found that a stadium would cost far in excess of the money available. With part of the bond

The illustration at the top shows the south stand. Note the dugout for rainy weather, the band section with leader's stand, the concession booth, the special one-piece plywood seats and the press box. Details of the plywood seats and the press box are shown on page 14. The center supporting poles are placed in the aisles thereby causing a minimum of view obstruction. The middle illustration shows the entrance to the south stand and the press box. The bottom illustration shows the north stand taken from the press box section on the south stand.





View of upper level showing press box and radio booth in rear.

issue still outstanding, no more money could be added at that time, particularly when a survey showed that a rapidly growing enrollment would mean additional elementary school classrooms would be needed.

The neighboring city of North Bend offered its excellent facilities on a rental basis and for two years the Coos Bay team trekked to North Bend on game nights, complete with "home" equipment and rabid rooters.

This was a vexing situation and by early 1948 the lack of home facilities was being discussed throughout the town. A group of citizens met with the board and school officials to discuss ways and means to remedy the situation and to provide seating accommodations for the track and field below the gymnasium. This resulted in a concerted effort to bring the various assets and forces of the community to work on one big project.

The community did co-operate. The student body took the final action that set the project rolling. The students voted to issue \$10,000 worth of non-interest bearing bonds. These were sold to people of the community with the sales campaign handled by a group of downtown boosters known as the Quarterback Club. This money is being retired from the student body share of athletic earnings.

The Coos Bay Lumber Company, largest sawmill in the area, offered to donate all the lumber needed, approximately 300,000 board feet and worth about \$30,000 at retail. A trucking firm and a fuel company provided trucks to deliver the lumber. Clearing was done by construction firms that gave free use of equipment and charged only out-of-pocket labor costs.

F. M. Stokes, a Portland, Oregon architect, agreed to base his fee on

dollar cost to the school instead of on total value of the building. Hardware stores provided nails, bolts and hinges at cost. Plumbing supplies came the same way, as did paint, gravel, cement and electrical supplies. Machine work was done at cost by a local shop.

A roofing contractor sold the roofing material at cost, then donated his work and that of a helper in applying it. A piling logger selected special poles for the field lights, cut them and never sent a bill. City officials expedited movement of the 85-foot "sticks" through downtown traffic. Power company linemen volunteered to erect and wire the poles.

The Evans Products Company, another large local industry, offered reserved seat chairs of moulded plywood. This required engineering research and special designing, but out of the project came a one-piece waterproof seat of plywood, providing comfort to people in a wide range of sizes. Tests were made for occupancy fatigue, strength and durability. So enthusiastic was the reception the company may make it a permanent addition to its line.

Final gifts were a \$1500 electric scoreboard from a department store, a 60-foot steel flagpole from the Veterans of Foreign Wars, a flag from the V.F.W. auxiliary, and a public address system given by a bakery and a radio shop.

A valuable donation came from labor and trade unions which, by membership vote, gave a day's work per man. Electricians, plumbers, carpenters and painters co-operated. Several community work days were held, with students and townspeople bringing tools and pitching in under a foreman's direction.

When completed, the district had expended \$72,466.91, but the ap-

praised value of the stadium is \$120,000.

The stands run 120 feet long on each side of the field, between the 20-yard lines. The stands closer to the field border tight against the running track and rise sharply so that the spectators' view is unobstructed. The south stand, for example, has the first row of seats 8 feet above the field and each succeeding row is 17 inches higher for thirteen rows. Both stands are covered with an overhanging roof.

All supporting construction under the seats themselves is bolted. There is not a single nail in the understructure. Four large "H" steel beams 60 feet apart support the stands and lights. A timber extension rises above the stand on each steel beam, supporting the field lighting so that no poles obstruct the spectators' view. The lights themselves are 72 feet above the field.

To gain entrance, one may approach from any street or parking lot surrounding the field and enter at any one of eight ticket booths, all covered. The field is enclosed by a six-foot fence of woven wire fabric, topped by three strands of barbed wire. All entrances and exits are situated so that no one either entering or leaving is ever on the playing field.

In both stands there are lavatories as well as large concession booths. The south stand has more special features, since it lies directly below the gym against a steep bank. On the field side, a 72-foot players' bench is built in under the front of the stand, dug-out fashion, to protect the players in inclement weather. Dressing room and shower facilities are in the gym, next to the field, but halftime and pre-game squad rooms are built in under the stand, along with a special officials' room. All are equipped

(Continued on page 44)

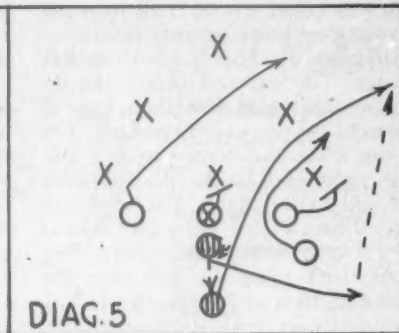
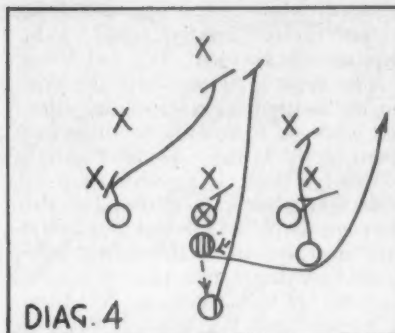
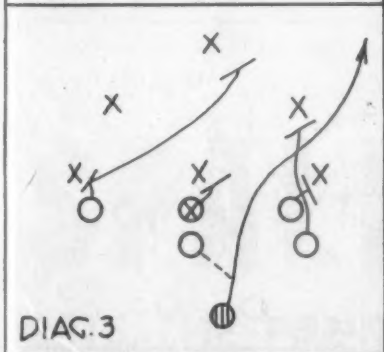
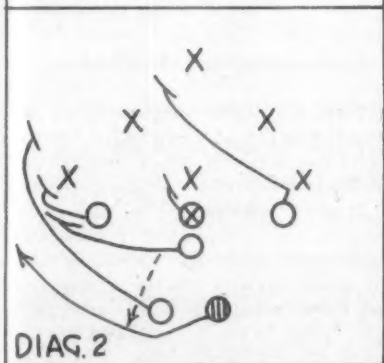
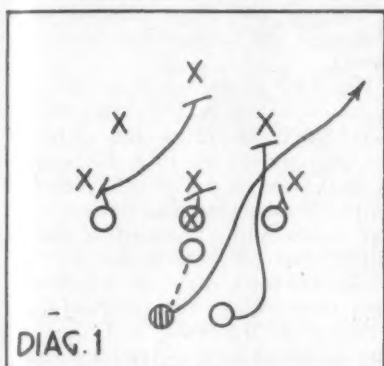
View of the moulded, one-piece, 17-ply, plywood weatherproof seats.





# SIX MAN at CHESTER

By STEPHEN EPLER  
Founder of Six-Man Football



On October 7, 1948 the town of Chester, Nebraska (the birthplace of six-man football) welcomed back Stephen Epler, the founder of six-man and former coach at Chester. To celebrate the fifteen anniversary of the game the town designated that day as "Stephen Epler Day" and the high point of the festivities was a game between Chester and Norfolk Sacred Heart which the former won, 26-2. As Mr. Epler watched the game he was surprised to find that the basic formations and plays used by both teams were very similar to those used in the first game of six-man football. As Mr. Reuben Schleifer, Chester's present coach, is the fourth or fifth coach Chester has had, the formations were obviously not inherited. Mr. Epler obtained notes from Coach Schleifer on his system and plays and gives us the following account of the six-man game at Chester.

CHESTER USES two basic types of offense, the T and the single wing. The T is best suited for power plays while the single wing offers more opportunity for deception. This is contrary to eleven-man football in which the T implies deception and the single wing, power. The difference is brought about by the clear pass that is required in six-man football. Boys with speed and good ball-handling ability readily adapt themselves to the single wing, while the big rugged boys are more at home using the T. Since most football squads do not possess speed or power alone, both types of offense make a diversified attack possible.

For the entire 1948 season forty different plays were used. For the

first two games only a dozen or so were used and others were added later as different teams were encountered.

The offensive attack is well balanced for all plays are called to both left and right. Chester sets up plays in series of three or four, thus increasing their effectiveness.

The following are key plays in Coach Schleifer's offense: In Diagram 1 is shown the T formation power play. The left end checks the defensive right end and then cuts for downfield blocking. The center blocks the defensive center to the left. The right end takes the left end to the outside. The quarterback, after taking the ball from center, spins and gives the ball to the left halfback and then goes through the hole to help block the end. If the end is already out of the play he will lead the interference. The right halfback takes two steps to the right and then cuts through the hole to run interference. The left halfback delays until he receives the ball from the quarterback, then follows his interference through the hole and usually cuts to the right once he is in the secondary. This play may be called to either left or right.

Diagram 2 is the T formation left end run. The left end blocks the defensive right end to the inside. The center blocks the center to the right. The right end checks his end and then cuts across for downfield blocking. The quarterback takes the ball from center, spins, and while in motion to the left, laterals the ball to the right halfback. He then runs interference. The left halfback leads the interference. This play may be

Six-man football offers the greatest field for expansion of the athletic program in the small school. This is our thirteenth article on the game since the end of the war. The Athletic Journal is the only national coaching magazine to devote any space at all to the six-man game since the close of hostilities. Six-man is a great game. It deserves the support of all publications. It will continue to receive ours.

A statement of policy by the publisher of

THE ATHLETIC JOURNAL

called to either left or right by merely switching blocking assignments.

Diagram 3 is the single-wing line plunge. The left end checks the defensive right end and then cuts to the right for downfield blocking. The center takes the center to the left. The right end blocks the defensive left end to the right. The wingback cuts through the hole and blocks the strong side line-backer. The quarterback takes the ball from the center, spins and laterals to the tailback and then leads the interference. The tailback cuts through hole and cuts to right once he is in the secondary. This play may be called to either left or right.

Diagram 4 shows the single-wing reverse. It is the same as the line plunge except that the quarterback does not go through the line to run interference but waits after giving the lateral to the tailback. The tailback cuts close to the middle and, charging low, reverses the ball to the quarterback. The quarterback sweeps his own right end while the tailback goes on through the line for a downfield block. (On good exchanges the tailback will usually be tackled; consequently a good fake is essential.) Line play is the same as in the line plunge except that the right end will take his man in instead of out. This play may also be called to the left or right.

Diagram 5 shows the pass. It is the same as the reverse except that the quarterback stops after faking an end run and whips a pass to either the left end, who goes deep, or the wingback or tailback, who are shallow. This play may be called to the left or right.

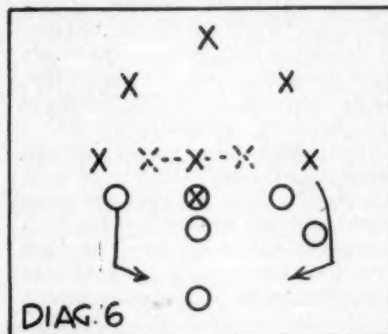
### The Chester Defense

Chester uses a 3-2-1 defense with variations from game to game depending upon the style of offense that their opponent uses. (See Diagram 6). If the opponent is exceptionally strong at passing, a 2-3-1 may

be used, while if the opponent uses a concentrated ground attack, a 4-2 defense may be used.

**The Ends:** Chester plays the ends on the outside shoulder of the offensive ends or wingback. As in eleven-man football, their primary job is to turn in and, if possible, stop all wide end sweeps. To accomplish this they are coached to charge three steps and then cut in as illustrated. If it is evident that a pass play is coming up, the ends will check the offensive ends, thus keeping them out of pass-receiving territory. The ends then go in and help get the passer.

**The Center:** The center is the anchor man on the 3-2-1 defense. He



must be alert in order to analyze the offense quickly so that he can assume the strongest defensive position possible. As illustrated, the center may play the opposing center head-on; he may vary his play to either right or left so as to split the end and center; or he may float with the play. He must charge fast and hard, especially on pass plays when the passer is to be rushed, while the ends are checking their pass-receivers momentarily. The key to successful center play, as well as the other defensive positions, is a constant variation of style of play and defensive position. Above all, a defensive player should not commit himself until the offensive team has completed its huddle and called the next play.

**The Backs:** The line-backers are deployed approximately four to five yards behind the line of scrimmage just inside the defensive ends. Their job is primarily pass defense on a zone basis and they should come up fast to take care of end sweeps that the ends may have turned in. The two line-backers are also the plugs for any holes that may open up through the line. The line-backers should be good open-field tacklers possessing good speed and, for pass defense, height.

**The Safety:** The safety plays ap-

proximately eight to ten yards behind the defensive center except on either third or fourth down when a punt situation occurs. Since the safety is in the last line of defense, he should be a speedy, sure open-field tackler. The safety covers all long passes and it is absolutely essential that he is not "sucked out" of position on any running or pass plays until the direction of the play is definitely established.

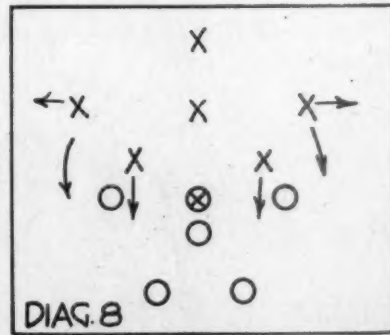
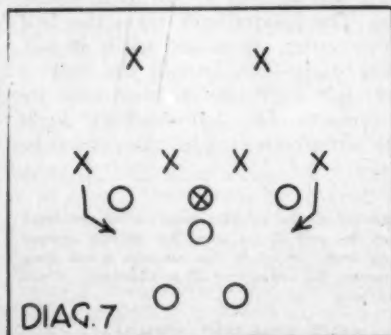
The 4-2 defense is basically the same as the 3-2-1 except that one of the line-backers moves into the line between either end and center (Diagram 7). The safety then moves up into the vacated line-backer position. This defense is exceptionally strong against running plays and should be used on goal-line stands or on third or fourth down situations when the required yardage is small. On pass plays the line-backer who moved into the line may drop back, or the weak-side end may drop back to protect.

The 2-3-1 is an excellent defense against a strong passing team (Diagram 8). When using this defense the ends should be in a bit closer while the center shifts back between the two line-backers. The line-backers play a few yards wider than usual so that they will be on the outside of the offensive ends or wingback. They then assume the responsibility of stopping the wide end sweeps. The safety plays a bit deeper than usual.

### Fundamentals and Conditioning

While plays and formations are essential, the key to successful coaching, especially in high school, is fundamentals and the routine phases of practice sessions. "The wide-open game of six-man football requires so much speed, precision blocking and sure tackling that we try to emphasize these points in our daily two-

(Continued on page 47)



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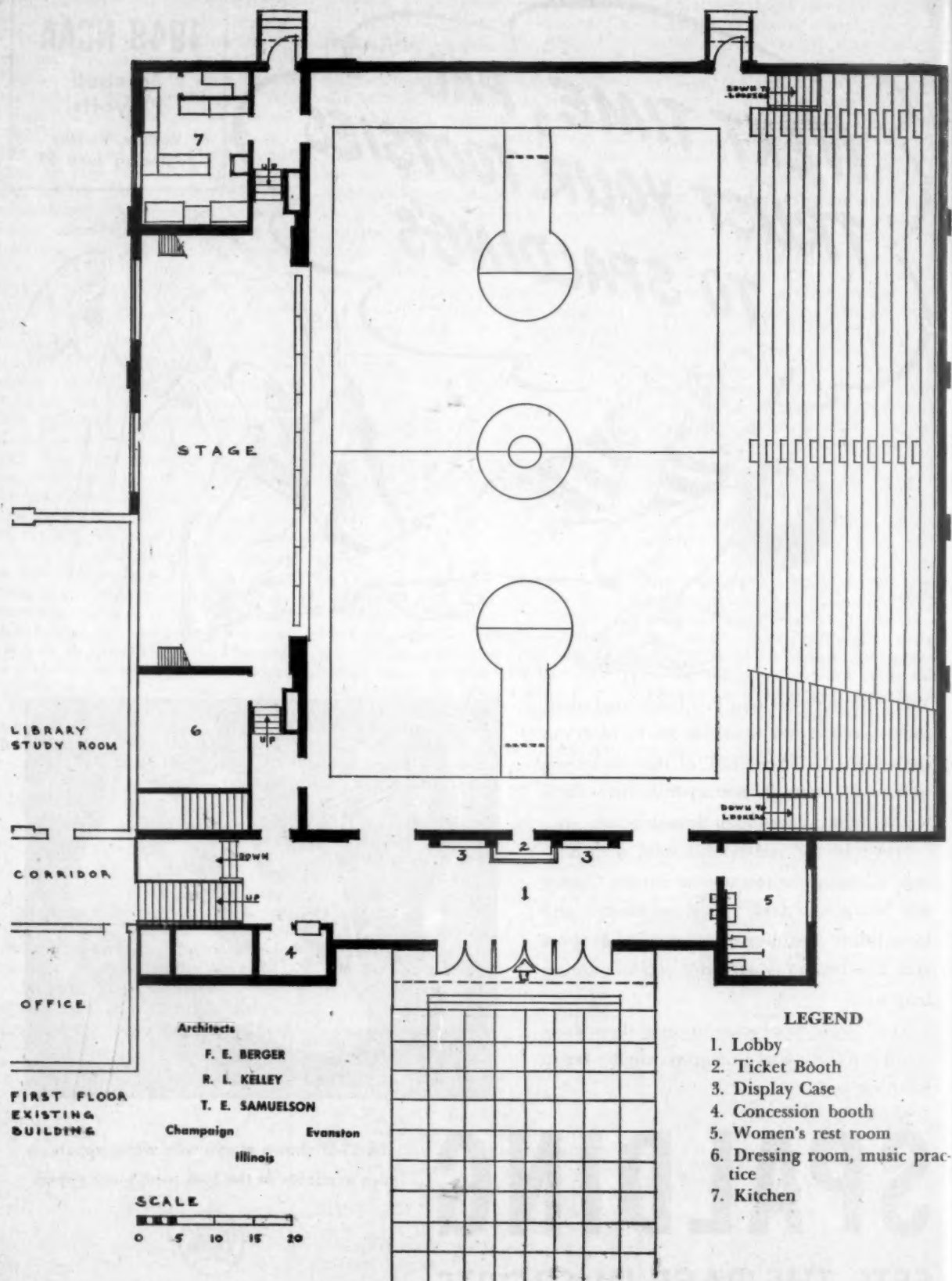
# SPALDING

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# Genoa Builds a Gym

**M**AY OF 1949 marked the completion of a new, modern gymnasium at Genoa Township High School, Genoa, Illinois. Built at a cost of \$225,000, the new structure is complete with such improvements as a ceiling constructed of acoustical Celotex, a ventilated locker room and window lighting on all four sides.

This new gymnasium answers a long-time need for a building which would serve as a center for a variety of community activities as well as provide adequate facilities for basketball games. With a permanent seating capacity of 850 and facilities to seat an additional 600, the new gymnasium will provide ample accommodations for the population of 1500 of the community. When used as an auditorium with folding chairs placed on the gym floor, the seating capacity would be easily doubled.

An initial bond issue of \$196,000 was passed in December, 1946 and an additional bond issue of \$60,000 was passed in January of this year. (Part of the appropriation was used for a shop for industrial arts and agriculture built separately and located at the other end of the school.) Construction on the gymnasium-auditorium began in March of 1948.

The interior over-all dimensions of the gymnasium are 106' x 119'. The gym floor itself measures 60' x 98' and the basketball court 50' x 84'. The stage area is 23' x 56' and the stage level is approximately four feet above the gym floor. There are dressing rooms located on either side of the stage. Above the dressing rooms there are storage rooms.

The ceiling of the gym is constructed of acoustical Celotex which deadens noise and practically elimin-

ates all echo. The lighting fixtures are sunk in the ceiling. The interior height of the ceiling is 22'. Windows are located high on three sides and also in back of the stage, thus natural lighting is still possible even though the Celotex ceiling is used in place of skylights.

An air conditioning system provides both heat and circulating fresh air. The interior walls are constructed with glazed tile to a height of eight feet. This enables the walls to be washed easily. Above this the walls are cinder block.

Swinging fan-shaped basketball backboards, which may be drawn up and out of the way, permit an unobstructed gym floor for any events such as movies, tennis, badminton, etc. A new electric timer clock is installed at one end of the gym on the side nearest

*(Continued on page 36)*



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*Nation-Wide Amateur Athletics*

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MAJOR JOHN L. GRIFFITH JOHN L. GRIFFITH  
Founder Publisher

## Athletics Comes of Age

ANOTHER SCHOOL year is rapidly drawing to a close. The school year and the athletic year are, to us, synonymous. This past year may be rightly classed as the greatest year ever in school and college athletics. Interest, attendance, participation and performance have exceeded every previous year.

Shortly after the first World War, America entered upon what is commonly called the Golden Era of Sports. It was during this period that the large stadia were built, America's athletic heroes held sway and attendance soared to undreamed of heights. In fact, the Golden Era of Sports was the awakening in the American public of the importance of sports and a realization of the values therein.

Future historians may well call this period following the second World War the Platinum Era of Sports. For it is this period that has witnessed school and college sports come of age. Athletics has moved down through the professional and college ranks to the secondary schools or to the grass roots.

Today's performances in almost every field of athletic endeavor not only excel those after the first World War, but do so to a considerable degree. In making such a comparison we do not refer to high school performances because high school athletics, relatively speaking, was in its infancy. The comparison is made between today's and yesterday's performers in college athletics. As a concrete illustration, the average times for the individual track events and relays (both college

and university) for the years 1926-28 at the Drake Relays was 5:84.6. For the same events the average time for the years 1946-48 was 5:69.9 or better than 13 1/2 seconds improvement. The reason for the improvement is obviously the better coaching that today's college stars are receiving during their high school or formative stage.

The stadia and athletic plants that characterized the Golden Era at the university level are now characterizing this present era at the scholastic level. This again offers proof that, as it comes of age, athletics is building a broad base on which to stand.

As athletics grows up, education in general regards it in a much more suitable light than was the case during the twenties. Today educators realize the inherent values in competitive athletics and, as such, are striving to control the features which might destroy it.

During the decade after the first World War, the athletic coaches and the physical educators viewed each other with mistrust. As athletics reaches its maturity this situation no longer exists. The credit for bridging this unfortunate gap belongs to those who administer high school athletics. The high school authorities in most instances have decreed that the coach must also teach academic subjects. The colleges, quick to keep pace with educational trends, instituted departments of physical education and, because of the similarity of work, many college students, who were preparing to coach, majored in physical education. Today there are very few secondary schools that do not have at least one member of the coaching staff teaching physical education. The dual capacity of these particular individuals has made for greater understanding between the two fields.

Some authorities have stated that attendance has reached its peak and that a decline is in prospect. It is true that there has been a slight dropping off in the economic picture and that the entertainment dollar is becoming less plentiful. Athletics, through superior performance, good public relations and expert showmanship, has fastened itself strongly on the American people. When the depression of the thirties came along athletics suffered heavily at the box office. During the Golden Era only a comparatively small proportion of the American people were establishing the attendance records for those times. Today the number of those subjected to athletics is many times greater. Twenty years ago athletics was a luxury. Today it is still a luxury, but like the electric refrigerator, an almost essential part of the American peoples life. Athletics will continue to receive a good share of the entertainment dollar.

Athletics has reached its maturity. From a thin

*(Continued on page 51)*

*Play Safe with*

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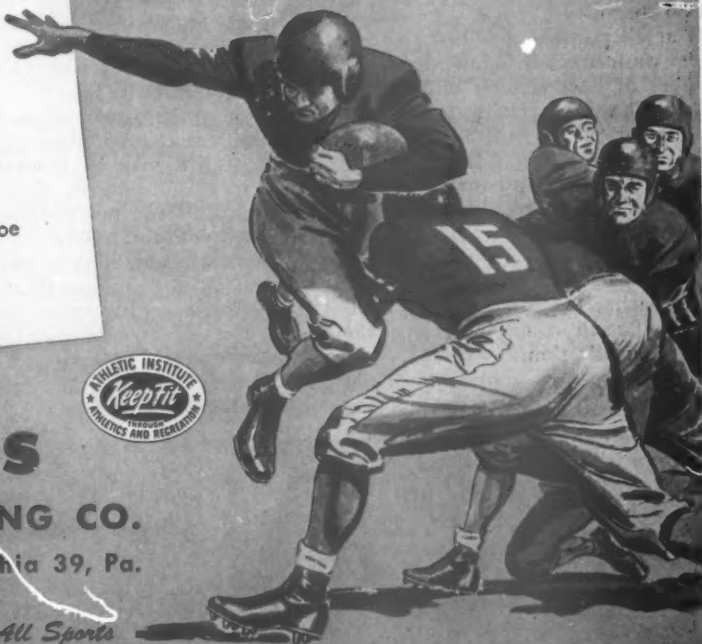
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# Planning the Football Season

By SOL KAMPF

Assistant Football Coach, University North Dakota

**I**N PLANNING the football season the author has taken into consideration six general features which usually concern coaches most. It is felt that if these features are planned during the summer or pre-season period, the coach will be able to proceed more smoothly during the season.

1. *Inventory of Facilities, Equipment and Supplies.* The playing field and practice field should be given equal consideration. Much work may be carried out on small practice fields as well as on large ones. In small areas such skills as individual line play, both offensive and defensive, may be practiced. The backs may drill on quick starts and spins. In addition, middle-of-the-line techniques and plays may be perfected in such locations.

The big points in facilities are: have plenty of room to operate in — delegate the size of the space to the technique being taught; have areas fairly close together so that the team may move from one to the other rapidly and so that segments of the team may be brought together quickly; have some place to work out during inclement weather. These areas should be lined up before the season begins.

If at all possible it is best to have more uniforms on hand than the number of boys coming out for the squad. This is especially true if boys are invited out by mail. Several players like to bring along friends to try out for the team and many times a new crop of boys show up on their own.

In working with teams in scrimmage or pass drills and punt drills, most coaches like to have one team wear different colored jerseys for quick identification.

Sporting goods companies have come out with a new type slip-over

which is inexpensive, simple to slip on and applicable to several sports. This slip-over, which covers the back and chest only, comes in bright colors and has enough elastic in it so that it clings to the body.

Regular practice jerseys are one of the most important items throughout the season and each player should be provided with two so that he will have an opportunity to change off. If, for one reason or another, it is not possible to provide each boy with two practice jerseys some provision should be made to launder

**S**OL KAMPF graduated from Davis and Elkins College where he played football. He received his masters at Indiana University. He coached at Davis and Elkins and Western Michigan and this fall moves to North Dakota State as line coach.

the one. It is suggested that such jerseys be laundered during the weekend when a game is played and there is no need for them.

If a coach thinks he is going to be short of shoes in the fall he may want to do what one coach did who, when he invited his boys out for fall training, requested that they bring their own football shoes along for practice, if possible, and that the school would be sure to provide them with game shoes.

As for practice equipment such as blocking machines, dummies, etc. much of this may be gathered and made serviceable during the summer months. This equipment should also be tested for durability.

The tackling dummy is still standard equipment for football although many coaches would rather have the boys pair off and practice tackling slow motion to get the feel of it; then later on, go at it hot and heavy in scrimmage.

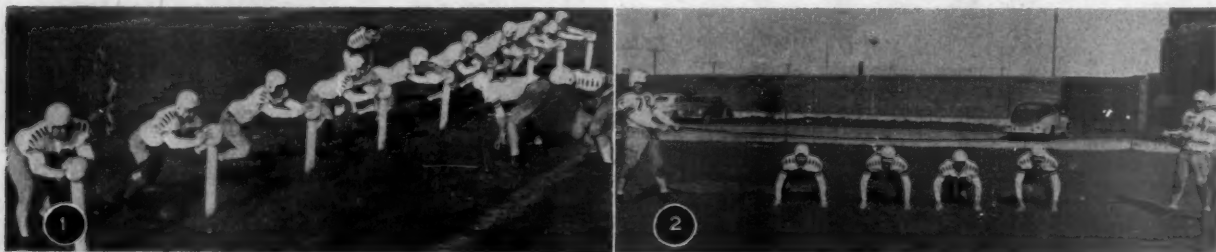
Blocking dummies are, of course, invaluable; but if none are on hand a coach can still make his own by rounding up some old mattresses, rolling them tightly and covering them with heavy cloth, burlap or canvas.

Posts or pipes about thirty inches in height with a round object on top (or helmets placed on top) may be erected during the summer. They are good to teach linemen the shiver charge, slant charge, spontaneous reaction to the ball, etc. The posts or pipes should be placed firmly in the ground so that they will not come loose by constant jarring (Illustration 1).

A coach I know believes that he has a fine way to make his linemen charge low. He strings a rubberized rope from one goal post to the other and adjusts the height accordingly. He then lines up the men and has them charge under the ropes. For this type of drill he recommends the kind of rope used in boxing rings since they are padded and will not injure the boys if they happen to charge too high.

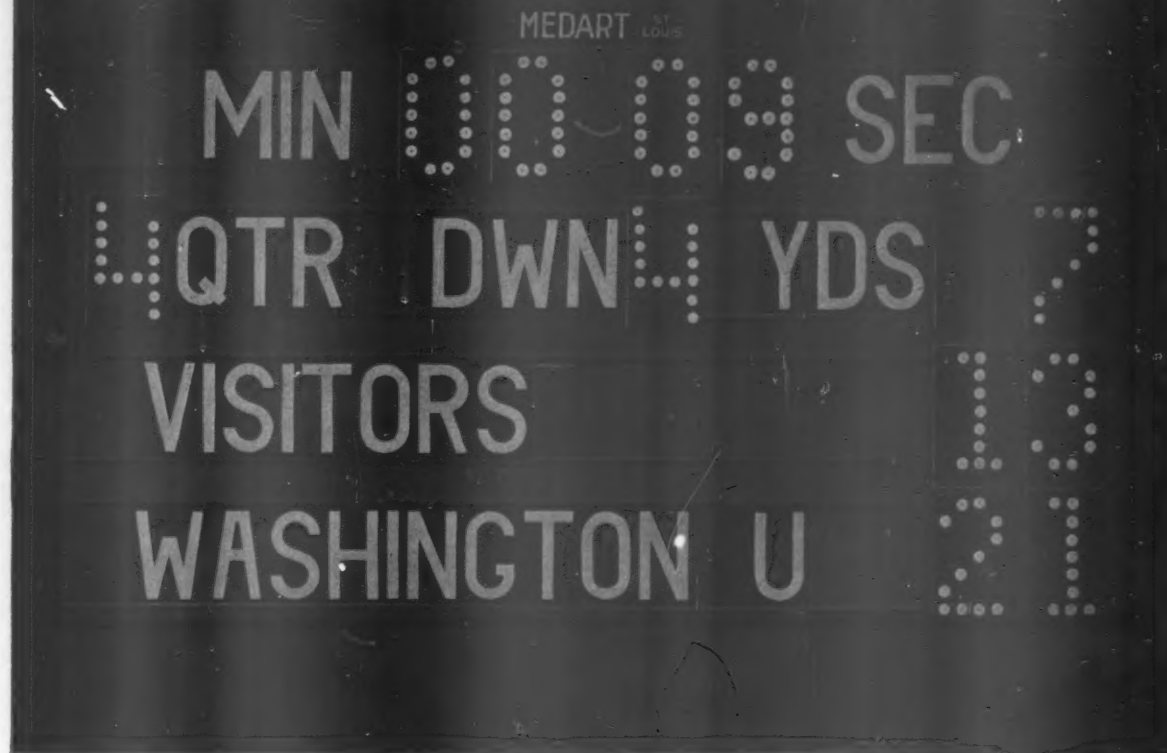
At a coaching clinic Burt Ingwersen, line coach for Illinois, discussed the use of such a rope but in place of being tied to goal posts the rope is held by a boy at each end. This allows the rope to be raised and lowered easily. He cited the example of a team preparing to play against a single wingback formation. Since the charging must be low and hard the rope is held lower than usual (Illustration 2).

Another project is to build a four-post affair. The posts are about four and a half feet high, four inches by four inches in thickness and are spread approximately a yard and a half apart. They may be used in dummy scrimmages for work against various types of defenses. For example, if the coach wishes to work against a five-man line he merely places a boy at one end of the posts. If he wishes to work against a six-man line he places a boy at each end. This arrangement is especially valuable when there is a shortage of



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boys or when the coach is planning to give all his boys a chance on offense. (Illustration 3). When the entire team is not working with the posts it is a good idea to work the backs only so that they perfect their spacing and timing in relation to the holes they should hit (Illustration 4). The posts should be placed firmly in the ground and should be padded to prevent injury.

Expendable supplies should be collected during the summer months. The four most important pieces of expendable supplies are: T-shirts, towels, sweat socks and supporters. Towels may have the same stencil as the T-shirt such as: "Property of Highland Park H.S.A.A." Many schools have the boys bring their own towels, supporters and T-shirts.

The manager should be sure to have an emergency kit with him on the field. It should contain such handy items as: shoe laces, chin straps, string, black tape, pencil and paper, chalk, spare pieces of sponge, etc.

**2. Study of Available Personnel.** During the summer months a coach should have a very good idea of the material he will have on hand for the forthcoming season. He should keep a file on each boy on his squad showing the boy's physical qualifications, such as weight, height, type of build, etc. plus the type of experience he has had, positions played, assets and weaknesses and other information he considers important. One successful coach we know in North Dakota takes the names of the boys he has and places them in at their position on a large card set up for his formation. For example, for the single wing, a coach would list below each position the men capable of playing in that position. He should also list the passers, punters, kickoff men, point-after-touchdown men and the undecided personnel. This affords the coach the opportunity to study his formation with the possibility of adjusting it to meet the material on hand.

He may also work out the possi-

bilities of using the two platoon system for a similar card may list the defensive qualifications of the boys.

I recommend using three columns on a separate chart so as to plan the complete coverage of: material on hand, material necessary for a system to go well and where adjustments may be made. It should be arranged logically.

The first column would list the material needed to make the system effective. The second column should list the available material and should be matched with the first column. In the third column the coach should figure out where he can get material for column two that is not available at present. For example, he may lack a good running guard and by analyzing the problem of where to get him he might ask himself about the reserves he had last fall, new boys coming out during the spring, Freshmen coming up, moving a man from another position, etc.

Special characteristics of certain positions should be taken into consideration such as — it is easier to move a tackle to guard than a guard to tackle and it is easier to move a running guard to blocking back than a running guard to a halfback post. Some coaches feel the principle here is to move men in toward the middle of the line rather than from the middle out. This is due to the fact that speed is usually one of the first requirements of an end with size a close second.

**3. A Study of Individual Strengths and Weaknesses.** Many football players are not as good in one phase of the game as in another. Some boys, for instance, can punt very well but are poor blockers, others are good blockers but cannot handle a ball well. According to many coaches the big feat in coaching is to recognize the best in a boy, capitalize on it and develop his weaknesses at the same time. A coach must study individual differences and take full advantage of a boy's talents.

While it may seem easy to say that a coach will substitute men to

make up for their weaknesses, let's not forget that it is a tough task indeed to follow the strategy of a game and try to substitute players over and over again.

Sometimes a player himself can give the information as to his weaknesses and strengths that a coach would not otherwise gather from observation. I like to hand the boys a slip of paper and have them comment on the thought I present them with: **GIVE THE PLAYER YOU WOULD LIKE TO BE A LOOK AT THE PLAYER YOU ARE.**

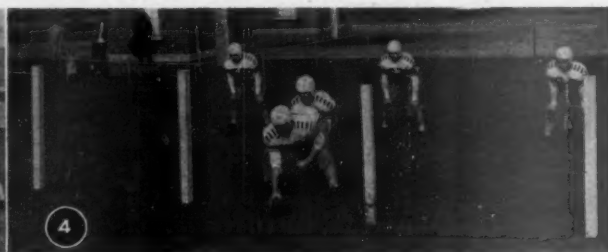
Health examinations are good places to find out individual weaknesses and strengths. A test of marginal vision, or one similar to that given for automobile drivers may bring interesting results. A passer with unusually good vision is far better than one suffering from near-sightedness.

The coach may arrange for the health examination during the first week of practice with the school or local physician. Biggest features to come in for attention are: eyes, heart, blood pressure and rupture. In addition the boy should be asked about past illnesses, operations, etc.

During spring training, if one is fortunate to have it, it is good to provide the boy with a written statement of his weaknesses and how he can improve them. Constructive criticism is best.

We know of one coach who has the following type of session with the boys to add zest to the correction of errors. He faces the group and exaggerates a player's weakness. It is up to the group to guess the name of the player he is imitating. A coach should try this and he will be surprised to see how well his players know each other not only by name but by characteristics. The boy who is being mocked usually laughs once he discovers it is himself and meditates: "Gee, do I look like THAT?"

**4. A Thorough Study of the Past Season's Offense.** If some kind of a record has been kept relating to the plays ran last season a coach has a





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good basis to work from in reviewing the past. Some coaches like to have a simple chart kept which they can review at the end of the game and at the end of the season. This chart carries such information as down, yards to go, opponent, play run, and what man on the opposing side made the tackle. Of course, other features such as the position on the field, who carried the ball, etc., may also be kept but the first mentioned are the most important. Coaches should have such records kept by an assistant coach, by a manager, by an injured player or by an ineligible player.

In analyzing one's past offense it is good to consider what happened when that extra yard was needed. A coach should ask himself why it went well or why it failed and what alteration he could make this fall to improve upon it. This play may also be improved by working out certain drills to rehearse techniques more effectively.

It is important to determine what effect the use of a man-in-motion had on the results of a play; or what effect a flanker had, or even a split end or any other variation used in connection with a play.

It is also important to know what effect changing defenses had on one's players. Also, a coach should reflect on the merits of changing a play once his team is on the line of scrimmage. Here the quarterback calls a check signal and the team automatically resorts to another play. A code word is sometimes used to change a play.

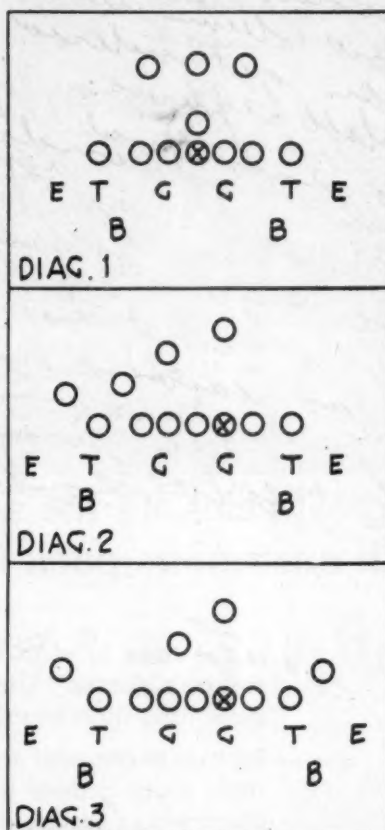
A coach should decide if his trick plays were worth the trouble. Was too much time used practicing a play that the quarterback was afraid to call or one that did not have the confidence of the boys even though it looked very good on paper? On the other hand the coach should remember that those trick plays that went so well for him are going to be watched keenly this coming year and must be camouflaged if they are to be used again.

If a coach is fortunate enough to have movies of his games he can discover much more than if he merely tries to recall what happened.

5. *Deciding on the Offense to be Stressed.* Two factors should enter into a coach's full consideration for the offensive formation or formations to be used. First, the material on hand, and second, the type of systems he knows best. One is equally as important as the other. Every sea-

son I read or hear an interview in which a coach is quoted as saying that he will use the system that is best for his material. However, one cannot change systems every year or so even every two years. Modern football is too complicated for such a venture. A coach begins to really know some of the problems related to his system by the end of the first and second years.

While high schools do not use as many varying defenses as colleges do, a prep school coach should, nevertheless, be on guard for most anything. In reviewing the notes of the



1947 American Football Coaches' Convention we came across reports of coaches who discussed defensive lines ranging from three to nine men.

Some coaches believe that material for one formation is absolutely standard. Adjustments are often made as is proven by some teams that use the T and utilize the left halfback as a passer instead of the conventional practice of having the quarterback throw. Trippi of Georgia used to pass out of the left halfback spot; Davis of Army did so on occasions, also.

After discussing the matter with several coaches we find there are

certain defenses a coach should be ready to meet in regards to the system he plans to use. They are listed below:

*Single wingback formation:* standard for this is a 6-2-2-1, normal, over-shifted or undershifted. Also a revolving backfield to meet sweeps. On windy afternoons or wet afternoons the single wingback formation might face a 6-3-2, a 7-2-2 or a 7-1-2-1.

*Short punt formation:* where end runs are not too prevalent but forward passing is considerable the 6-2-2-1 with halfbacks deep; the 5-3-2-1 or the 5-3-3 also might be used.

*T formation:* just about any concoction will be used; anything from a four-man line to an eight is popular. The most popular defenses according to our observation have been a 6-2-2-1 and a 5-3-2-1.

*Double wingback formation:* usually a 6-2-2-1 and maybe with ends crashing and tackles floating out. Sometimes a 6-2-3.

*Notre Dame Box Formation:* pretty much what a single wingback formation would face.

The number of plays a coach gives the squad means a lot. He should keep the total down for one play is actually three or four plays since changing defenses call for different assignments.

6. *A Study of Defenses for Opponents.* The off-season is a good time to plan special defenses. Here a coach has the opportunity to think clearly without any undue pressure and has a chance to talk with his assistants at great length.

If a coach possesses charts relating to the plays run against his team last fall, yardage made, etc. they should tell much about his defense. Sometimes old newspaper articles carry every play in a game.

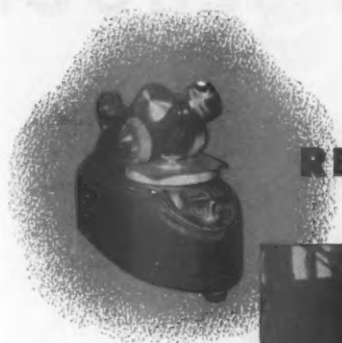
It is good to review on paper the manner in which the opposition scored on one's team throughout the season. Was it usually the fault of the defensive alignment or was it usually due to a miscue on the part of some individual? Was the defensive strategy varied or was it unchanged all the way through one's games?

Did the line-backers co-ordinate their efforts with the line well last season? This means much since they may plug up weak spots or bolster strength against a particular opponent's best scoring threat.

It seems to me that the only way to meet the demands of modern football is to develop players defen-

(Continued on page 49)

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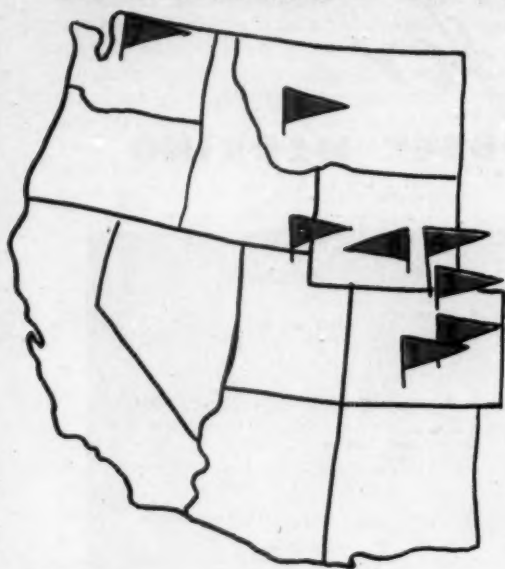
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# ATTEND A COACHING SCHOOL IN THE WEST



1.

## ADAMS STATE COLLEGE

Alamosa, Colorado, June 12-18

Don Crawford, Director

Tuition: \$25.00

STAFF: Carl Snively, Lynn Waldorf, Clair Bee, Vadal Peterson, Frank Gramer, Eddie Wojacki

See advertisement page 67, April issue

2.

## COLORADO COLLEGE

Colorado Springs, Colorado, June 6-10

Allison Blum, Director

Tuition: \$25.00. Room and board: \$25.00

STAFF: Frank Leahy, Moses Krause, Bill Early

See advertisement page 68, May issue

3.

## COLORADO HIGH SCHOOL COACHES ASSN.

Denver, Colorado, August 24-26

N. C. Morris, Don R. DeCombes and Ed Flint, Directors

Tuition: Residents—free; others—\$5.00

STAFF: Matty Bell, Ed Hickey

See advertisement page 62, May issue

4.

## COLORADO, UNIVERSITY OF

Boulder, Colorado, June 17-July 22, July 25-August 26

Harry G. Carlson, Director

Tuition: per term—residents, \$27.50; others, \$35.50

STAFF: Dallas Ward, Forrest Cox, Frank Potts, V. K. Brown, Charles Vavra, Frank Proutup, Roland Balch

5.

## MONTANA STATE UNIVERSITY

Missoula, Montana, July 25-30

Clyde W. Hubbard, Director

Tuition: \$10.00

STAFF: Adolph Rupp, Ted Shipkey

See advertisement page 56, May issue

6.

## UTAH STATE AGRICULTURAL COLLEGE

Logan, Utah, June 6-10

Tuition: \$10.00

STAFF: Lynn Waldorf, Ed Hickey, Roland Logan

See advertisement page 65, May issue

7.

## WASHINGTON STATE HIGH SCHOOL COACHES ASSN.

Seattle, Wash., Aug. 22-27

A. J. Lindquist, Director

Tuition: Members, free; others, \$10.00

STAFF: Bud Wilkinson, Frosty Cox, Jack Mosberry,

H. V. Porter

See advertisement page 50, May issue

8.

## WYOMING, UNIVERSITY OF

Snow Range Summer Camp, Wyoming, August 8-13

Glean J. Jacoby, Director

Tuition: \$10.00

9.

## IDAHO STATE COACHES ASSN.

Boise, Idaho, August 8-13

Tuition: \$10.00



5.

## LOUISIANA HIGH SCHOOL COACHES ASSN.

New Orleans, Louisiana, August 10-13

Woodrow Turner, Director

Tuition: \$2.00, \$5.00 and \$10.00

STAFF: Matty Bell, Blair Cherry, Ed Diddle, Bill Dayton, Henry Fruka and staff.

6.

## OKLAHOMA COACHING SCHOOL

Oklahoma City, Oklahoma, August 15-19

Clarence Breithaupt, Director

Tuition: \$5.00

STAFF: Matty Bell, others to be announced

7.

## TEXAS HIGH SCHOOL COACHES ASSN.

Beaumont, Texas, August 1-5

L. W. McConahie, Director

Tuition: Members—\$10.00; others—\$15.00

STAFF: Don Faurel, Carl Snively, Harry E. Smith, J. Russell Murphy, Adolph Rupp, Hank Iba, Emmett Brunson, Marty Karow, Eddie Wojacki

See advertisement page 48

1.

## ALABAMA, UNIVERSITY OF

Tuscaloosa, Alabama, August 15-19

H. O. Drew, Director

Tuition: None

STAFF: Don Faurel, University of Alabama Staff, basketball coach to be announced.

2.

## FLORIDA A. & M. COLLEGE

Tallahassee, Florida

A. S. Galtner, Director

3.

## GEORGIA COACHES ASSOCIATION

Atlanta, Georgia, August 15-20

Dwight Keith, Director

Tuition: Members—free; others—\$15.00

STAFF: Frank Leahy, Wallace Butts, Carl Snively, Bill Hartman, "Shorty" Doyal, M. C. Page, Adolph Rupp, Clyde Littlefield, "Duke" Wyrw

4.

## HOT SPRINGS COACHING SCHOOL

Hot Springs National Park, Arkansas, August 1-6

Joe Diddy, Director

STAFF: Frank Leahy, Matty Bell, John Barnhill, Clair Bee, Gene Lambert.

See advertisement page 27, May issue

8.

## VIRGINIA STATE COLLEGE

Petersburg, Virginia, July 11-16

H. R. Jefferson, Director

Tuition: To be announced

STAFF: Carl Snively, John Lawther

9.

## MURRAY STATE TEACHERS COLLEGE

Murray, Kentucky, June 10, 11

Ray Stewart, Director

Tuition: \$5.00

STAFF: Ray Elliot, Ed Hickey

11.

## NORTH CAROLINA, UNIVERSITY OF

Chapel Hill, North Carolina, July 25-30

Tom Scott, Director

STAFF: Carl Snively, Tom Scott, P. A. Feltzer, Bunn Hearn, R. A. White

ADDITIONAL SCHOOLS LISTED ON PAGE 30

## IN THE EAST



7.

### EASTERN PENNA. COACHES ASSN.

East Stroudsburg, Pennsylvania, June 20-24

Marty Baldwin, Director

Tuition: Pennsylvania coaches—\$35.00; others—\$38.00  
STAFF: Wallace Butts, Charles Caldwell, Bob Higgins, Don Carnovale, Charley Gelbert, "Duke" Wyre

See advertisement page 63, May issue

8.

### SPRINGFIELD COLLEGE

Springfield, Massachusetts, July 6 — August 9

Tuition: To be announced

STAFF: Alde "Buff" Donelli, Vadai Peterson, Ethan Allen, Emil Von Elling

See advertisement page 62, April issue

9.

### WEST VIRGINIA, UNIVERSITY OF

Morgantown, West Virginia, June 27 — August 1

F. J. Heltzer, Director

Tuition: Residents—\$5.00 per hour; out of state—\$7.00 per hour  
STAFF: Bud Degroot, Wes Foster, Leo Patton, John Lawther, Chick Davies, Art Smith, Steve Harkiss, Duke Wyre

10.

### PENN STATE COLLEGE

State College, Pennsylvania, three separate sessions  
For information write: Director of Summer Sessions, Room 110, Burrows Building. See page 58, March issue.

## IN THE MIDDLE WEST

1.

### FREMONT COACHING SCHOOL

Fremont Michigan, August 25, 26

L. J. Gottschall, Director

Tuition: \$8.50  
STAFF: Adolf Rupp, Cabby O'Neill, Bob Quiring, Floyd Eby, Harry Heyman

See advertisement page 58, May issue

### DOANE COLLEGE COACHING SCHOOL

(not shown on map)

Crete, Nebraska, July 25-29

Jim Dutcher, Director

Tuition \$15.00, Board and Room \$10.00  
STAFF: "Biggie" Munn, "Howie" Odell, Bill Glasford, Eddie Hickey, Frank Cramer

3.

### INDIANA BASKETBALL COACHING SCHOOL

Logansport, Indiana, August 8-10

Cliff Walls, Director

Tuition: \$12.00  
STAFF: Tony Hinkle, Larry Hobbs, E. N. Gage and others

See advertisement page 46

4.

### IOWA HIGH SCHOOL ATHLETIC ASSN.

Templar Park, Spirit Lake, Iowa, August 15-19

Lyle T. Quinn, Director

Tuition: Iowa coaches—\$15.00; others—\$22.50

5.

### KANSAS STATE HIGH SCHOOL ACTIVITIES ASSN.

Topeka, Kansas, August 22-26

E. A. Thomas, Director

Tuition: \$10.00  
STAFF: Ozzie Cowles and others

6.

### MINNESOTA COACHES ASSN.

Minneapolis, Minnesota, August 22-24

H. R. Peterson, Director

Tuition: Members free, others \$10.00  
STAFF: Bernie Bjorman, Osborne Cowles

7.

### MISSOURI, UNIVERSITY OF

Columbia, Missouri, June 16-18

Don Faurel, Director

STAFF: Matty Bell, Don Faurel, Wilber Stalcup, Tom Gotta

1.

### BETHANY COLLEGE

Bethany, West Virginia, August 15-19

John J. Knight, Director

Tuition: \$15.00

STAFF: "Slick" Merten, Charles Caldwell, Jr., George Saver, Carl Snively, Stu Holcomb

See advertisement page 42

2.

### COLBY COLLEGE

Waterville, Maine, June 16-18

Ellsworth W. Millett, Director

Tuition: \$17.00

STAFF: Adolph Rupp, Arthur Valpey

See advertisement page 70, May issue

3.

### CONNECTICUT, UNIVERSITY OF

Storrs, Connecticut, August 22-25

George Van Bibber, Director

Tuition: \$10.00

STAFF: Carl Snively, George James, J. G. Christian, Howard Hobson, Hugh Greer, Frank Kavanagh, John Squires

See advertisement page 66, May issue

4.

### EDINBORO COACHING SCHOOL

Edinboro, Pennsylvania, August 9-12

Jim Hyde, Director

Tuition: \$25.00 including room and board

STAFF: Charles Caldwell, Rex Earlight, Princeton University staff and South Carolina University staff

See advertisement page 69, May issue

5.

### NEW YORK BASKETBALL COACHING SCHOOL

Hancock, New York, August 18-20

John E. Sipes, Director

Tuition: \$10.00

STAFF: Howard Hobson, Marion Crawley and others

See advertisement page 44

6.

### NEW YORK STATE COACHING SCHOOL

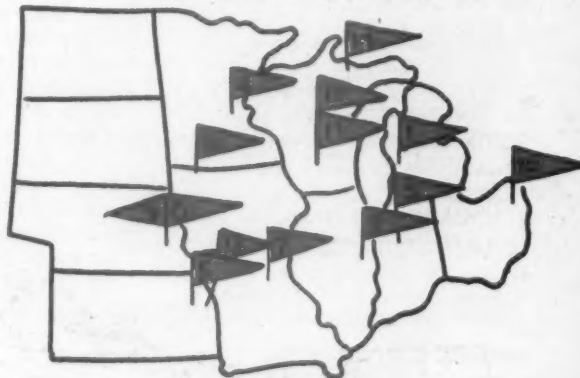
Rochester, New York, August 22-27

Philip J. Hammes, Director (Proctor H. S., Utica)

Tuition: \$35.00 (includes board and room)

Staff: Ray Elliot, Rio Eagle, Adolph Rupp, Howard Hobson, Joe McDaniels

See advertisement page 56, May issue



9.

### NEBRASKA, UNIVERSITY OF

Lincoln, Nebraska, June 7 - July 16, June 7 - July 30

Louis E. Moons, Director

Tuition: Summer school fees

STAFF: V. W. Lapp, Bill Glasford, Harry Good, L. E. Moons, C. E. Miller, Hollis Lopley

10.

### OHIO HIGH SCHOOL COACHING SCHOOL

Massillon, Ohio, August 9-13

Charles Mather, Director

Tuition: Members—\$5.00; others—\$10.00

STAFF: Sid Gillman, Joe Madro, Wes Foster, Enzo Barkhison, Stu Holcomb, Jack Hollenbeck, Jack Blott, Frank Murray

See advertisement page 54, May issue

11.

### WISCONSIN HIGH SCHOOL COACHES ASSN.

Madison, Wisconsin, August 15-20

Tuition: Members—\$1.00; Others—\$18.00

STAFF: Irv Williamson and staff, Adolph Rupp, Wisconsin High school coaches

See advertisement page 64, May issue

12.

### WISCONSIN, UNIVERSITY OF

Madison, Wisconsin, June 24-August 19

Harold A. Matson, Director

For complete information write: Director of Summer Session, University of Wisconsin.

See advertisement page 68, March issue

13.

### KANSAS, UNIVERSITY OF

Lawrence, Kansas, June 13-25, June 27-July 26

E. C. Quigley, Henry A. Shank, Directors

Tuition: Regular university fees

STAFF: J. V. Sikes, Phog Allen

## 14. NORTHERN MICHIGAN COACHING SCHOOL

Marquette, Michigan, August 8-12

C. V. Moser, Director  
Tuition: \$15.00 (includes board and room)  
STAFF: "Biggie" Munn, Ozzie Cowles, Six Michigan Coaches

## WEST

### ARIZONA COACHES ASSOCIATION

Flagstaff, Arizona, August 15-20

Nick Ragus, Director  
Tuition: \$10.00, \$15.00 and \$20.00  
STAFF: Lynn Waldorf, Bob Winslow, Fred Enke, "Pop" McKale

### CALIFORNIA WORKSHOP AND SCHOOL

San Luis Obispo, California, August 1-12

Vernon H. Moacham, Director  
Tuition: \$7.00  
STAFF: Lynn Waldorf, Everett Dean, Lawson Little, John Thompson, Jess Hill

### ROCKY MOUNTAIN COACHING SCHOOL

Billings, Montana, July 18-23

Herb J. Klondt, Director  
Tuition: \$25.00  
STAFF: Lynn Waldorf, Ed Hickey

### UTAH COACHES ASSN.

Salt Lake City, Utah, August 15-20

Don Dixon, Director  
Tuition: \$15.00  
STAFF: Dutch Meyer, Jim Aiken, Clair Bee

## SOUTH

### SOUTH CAROLINA COACHES ASSN.

Columbia, South Carolina, August 4-10

Harry H. Hedgepath, Director  
Tuition: \$7.00 members; \$15.00 non-members  
STAFF: Carl Shively, Les Patton

### TENNESSEE ATHLETIC ASSN.

Knoxville, Tennessee, July 27-30

Farmer Johnson, Director  
Tuition: \$10.00  
STAFF: Herman Hickman, Bob Noyland

### VIRGINIA COACHES ASSN.

Blackburg, Virginia, August 17-20

W. L. Younger, Director  
Tuition: Free for members, others \$10.00  
STAFF: Arthur Guepe, R. C. McNeish, Rube McCray, Art Merton, Dick Eslock and others

## MIDDLE WEST

### ILLINOIS STATE NORMAL

Normal, Illinois, June 14-16

Howard J. Hancock, Director  
Tuition: Free  
STAFF: Berio Bieman, Paul Christman, Eddie Hickey, Otto Vogel, George Brennan

### LOWER MICHIGAN COACHING SCHOOL

Mount Pleasant, Michigan, August 15-19

D. P. Rose, Director  
Tuition: \$15.00 (includes room and board)  
STAFF: Biggie Munn, Eddie Hickey

### SOUTHERN ILLINOIS UNIVERSITY

Carbondale, Illinois, August 22-24

Glenn A. Martin, Director  
Tuition: Free  
STAFF: Don Fawcett, Hank Iba, Burt Ingwersen....

### SOUTH DAKOTA ATHLETIC ASSN.

Huron, South Dakota, August 16-19

R. M. Walaeth, Director  
Tuition: Free  
STAFF: Ev Sholtan, Ray Duncan, Lloyd Stein

## NEW FILMS

**Famous Fairways.** A 16 mm. color film. Thirty minutes running time. Narrated by Ted Husing. Produced by A. G. Spalding & Bros. The film is available without charge to golf clubs or some similar gathering of golf enthusiasts. Write to the nearest Spalding office and give one or two alternate dates: 161 Sixth Avenue, New York, New York; 401 N. Broad Street, Philadelphia, Pennsylvania; 180 N. Wabash Avenue, Chicago, Illinois; 1137 S. Hope Street, Los Angeles, California.

This film takes the observer on a visit to six of the leading golf courses in this country and follows top-notch golfers as they play the famous holes that are discussed so frequently.

The film starts at the Oakmont Country Club, Oakmont, Pennsylvania where one "plays" a couple of holes with Lew Worsham, the club pro, and Jimmy Thompson, holder of the world's record drive. The next stop is Pinehurst and one's companions there are Harvey Ward, runner-up in this year's North-South Championship, and Dick Chapman, former U. S. Amateur Champion. The scene then changes to the interesting National Golf Club at Southampton, New York, where one sees a few holes played by Alec Gerard, Jr. and a member of the club.

Next one accompanies the three-time British Open Champion, Henry Cotton, while he plays a few holes at the Pine Valley Golf Club, Clementon, New Jersey. The camera now jumps clear across this country and one is taken to those two renowned West Coast courses, Cypress Point and Pebble Beach, where Jimmy Thompson and Lawson Little show their technique. The latter was twice U. S. and twice British Amateur Champion.

Many of the scenes are so strikingly beautiful that everyone exclaims as they appear on the screen. The excellent photography enables the observer to watch the balls in flight as well as if he were playing the shots himself.

"Famous Fairways" is entirely different from any golf picture we've ever seen and the indications are that A. G. Spalding & Bros. will be swamped with requests for this film. Be sure to get requests for this film in early.

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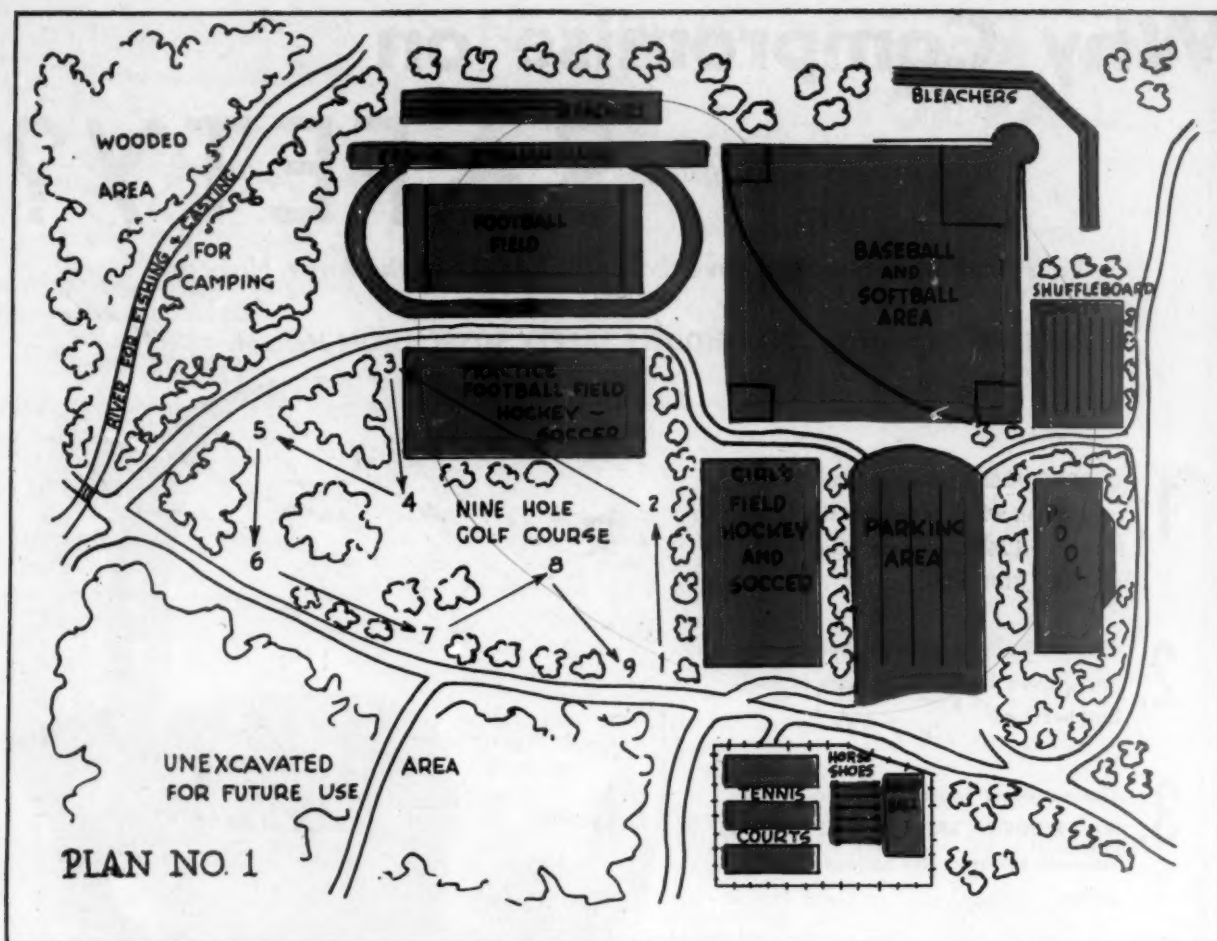


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# Constructing Athletic Facilities

By DAILY F. HILL

Coach, New Castle, Indiana, High School

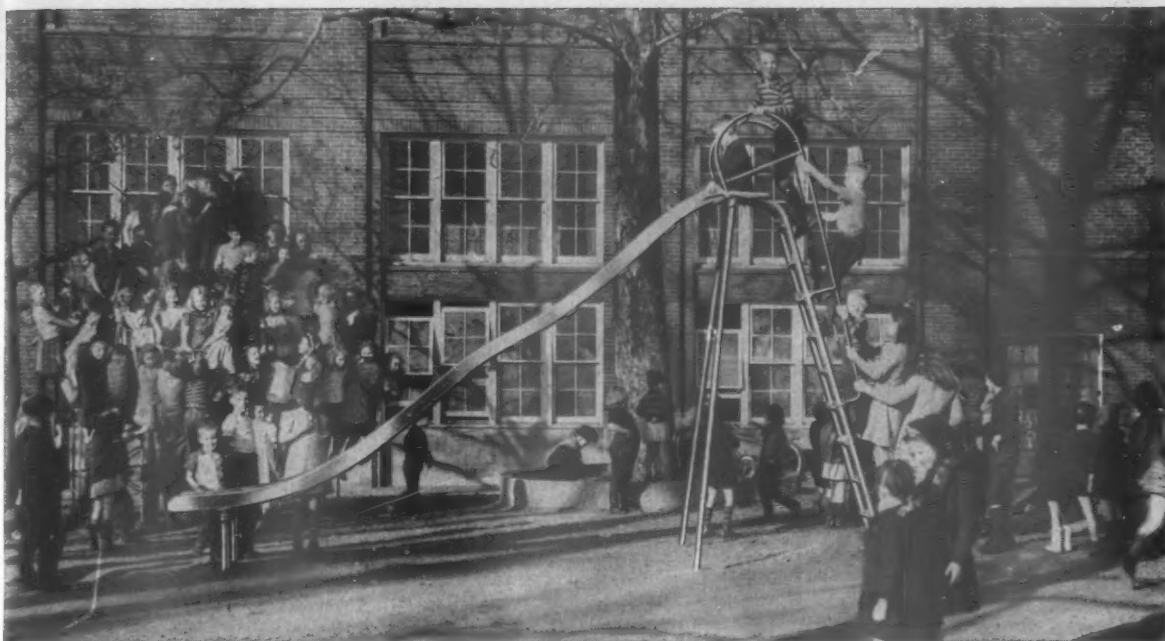
IN THE BOOM of post-war planning for physical education, keen-minded leaders have directed their attention extensively to buildings and grounds. Athletic magazines devote entire issues to building plans. Popular reading material points out this trend with frequent articles on "Living Memorials" — gymnasiums and athletic fields erected in honor of the war dead rather than useless monuments. No longer are leaders in the field willing to revise curricula around inadequate gymnasiums and athletic fields. Rather, they have gone far enough along in their post-war planning to realize that the foundation of a good physical education program is in the facilities upon

which this program is constructed. It is the purpose of this report to present ideas on buildings and grounds adaptable to the high school situation, with particular reference to the area of ground available in each situation.

Many problems relating to the construction and design of the gymnasium and athletic areas in a given locality are highly technical in nature and require expert advice. Any school or municipality contemplating construction should plan well ahead of time to have a committee of representative individuals chosen from the community at large, the school staff, and the administrators. The people chosen from the community should be vitally interested in some phase of

the project — its construction, administration, operation and maintenance, concessions, protection, and traffic regulations. A wise plan is that of visiting a number of athletic plants of various designs. Special effort should be made within this group to discuss the omissions of the plants visited. Knowledge and ideas gained from such visits, added to the study and advice of experts in gymnasium design, is the first step in a new building program.

Early in the planning, the location or building site must be determined. A careful analysis of the resources and needs of the school district is necessary in this step of planning. The possibilities of a site should be ex-



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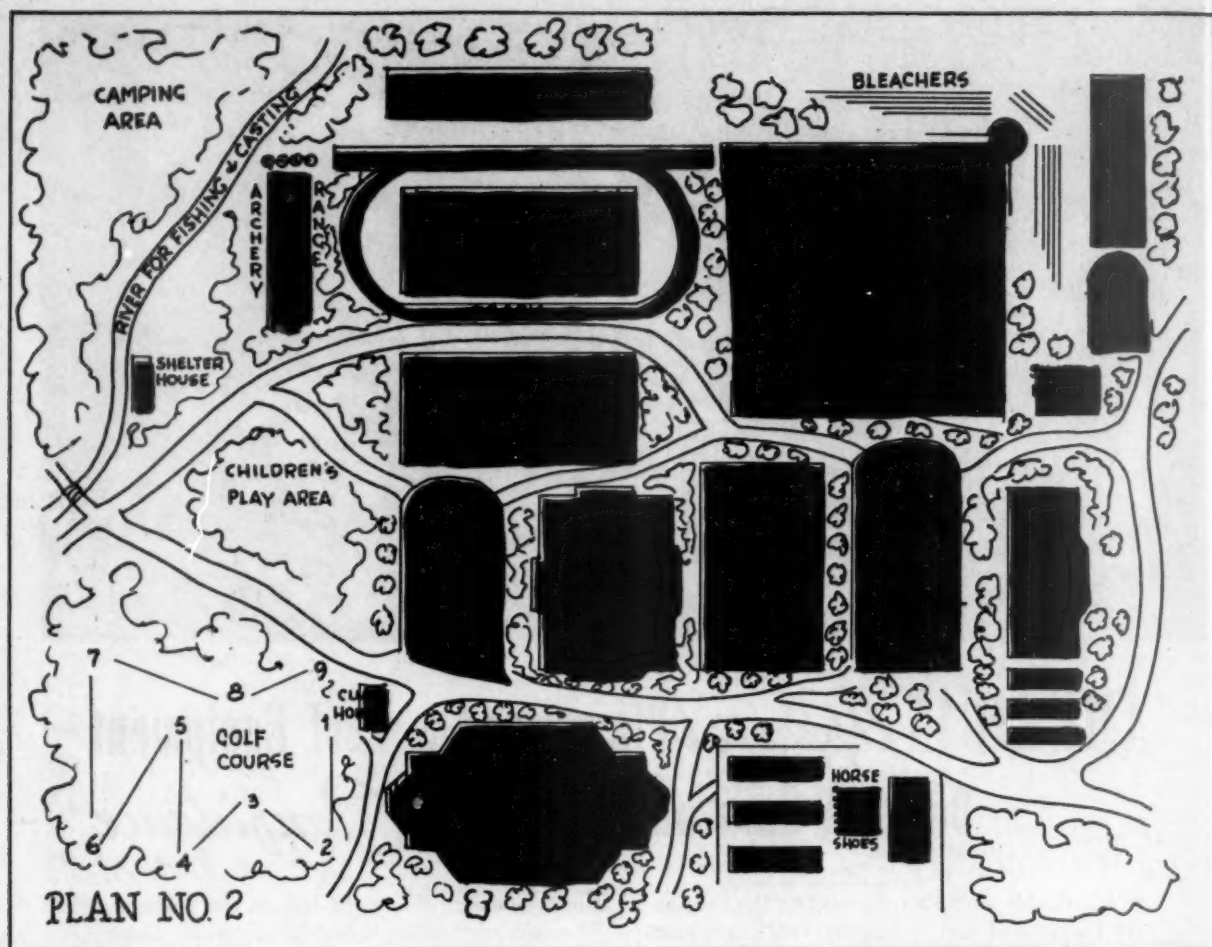
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explored and consultation held with experts in the field of building. There are several principles in determining a school site which should be considered. The selection of any school site should be made with full understanding of the over-all community plan, its needs, and possible changes that might take place in the future. It has been suggested by some authorities that the following community surveys should be made and analyzed:

1. Race
2. Nationality
3. Age
4. Family size
5. Types of residential dwellings in areas
6. Types of industries in area
7. Per cent of vacant land
8. Per cent of home ownership
9. Occupations of family heads

The consensus of opinion among principals and superintendents of high schools throughout Indiana seems to be that there should be at least 20 acres of ground for a high school athletic area, and that it should be located on a well-drained, gently-

sloping, wooded area away from busy streets, preferably in a quiet district. These administrators list the following as hazards to avoid in the selection of an athletic area:

1. Railroads. 2. Swamps. 3. Rivers.
4. Fire stations. 5. Mine shafts. 6. Air fields. 7. Stores. 8. Dust. 9. Gravel pits.
10. Inflammable storage. 11. Factories.
12. Taverns. 13. Noise. 14. Congested areas.

It is both economical and utilitarian to locate a new school or gymnasium

**D**AILEY-F. HILL played varsity basketball and baseball at Hanover College, Indiana. Following four years in service he coached at Napoleon, Indiana and at Eaton, Indiana before assuming his present duties at New Castle. He is working towards his master's at Ball State Teachers College at the present time.

next to an existing park, or to acquire park land next to an existing school. Long-range planning for physical facilities calls for planning with future usefulness in mind. First considera-

tion must be given to functional planning. The Athletic Institute suggests the following questions to be studied along the lines of functional planning:

1. Will the planned facilities provide recreation outlets for all the citizenry?
2. Are the locations of the selected sites desirable in view of: (a) Residential expansion? (b) Selected school sites? (c) Accessibility? (d) Population trends? (e) Public safety? (f) Public health?

3. Are the facilities being planned attractively in order to encourage a desire to participate?

4. Has an expansion or development priority schedule been established which indicates the order of urgent recreation requirements?

5. Are buildings and facilities being planned for multiple use?

6. Are there adequate plans for the maintenance and operation cost of facilities?

7. Are the personal comforts and services of the participants being planned for?

In order to formulate an original

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plan in this study, research was made to discover what landscape artists and leaders in the field were suggesting. Plans for various area sites were studied with particular attention paid to the amount of worth-while facilities that might be concentrated into the space available. Too often the one-block area is the only amount of space available to planners since few cities have 8- or 20- or 30-acre plots with which to work. However, by using the central location for the field house, the surrounding space may be used to good advantage for activity areas.

Play areas covering 8 and 22 acres offer many possibilities for varied activity. They may be definitely adapted to civic undertakings and may be planned with beauty of the site in mind. Such large areas can offer outdoor sports of tennis, basketball, baseball, volleyball, roller-skating, badminton, track, field hockey, and football with movable bleachers for spectators — all these outdoor areas in addition to a good-sized field house.

After studying plans for areas of all sizes, the following original plan is offered as a solution to the problems found in them. It is presented in two diagrams, the first illustrating the possible present lay-out, and the second that of a future long-range building plan. Plan I is for a 20-acre plot of ground and is designed with the city park plan in mind. In fact, it is planned with a particular 20-acre park site in New Castle, Indiana, as its basis.

New Castle, a city with a population of 21,000, at the present time has five elementary schools comprising 2500 children, one junior high school of 900 students, and one centrally located high school of 1200 students. Conditions are so very crowded that every available hall is being used for classrooms. No gymnasium facilities are found in the elementary or junior high schools and physical education for girls takes place in the city armory which is rented by the school. Future population figures do not view any decrease whatsoever, rather, in 1954, the number of students in each school will have increased one-third. With such crowded conditions it is the future plan to use the junior high school building for elementary classes, to erect a new elementary school complete with gymnasium, and to move junior high school students into the present high school. This being the set-up, there is a great demand for a much larger high school plant, complete with athletic fields and play areas and offering possibilities for

civic programs. Therefore, the city park plan seems to be the most adequate solution for cities such as New Castle.

Plan II illustrates the emphasis on functional planning (sometimes at expense of landscaping) but it is the plan in its first stages without the erection of the high school. It offers facilities for baseball, softball, football, outdoor basketball, hockey, soccer, tennis, and minor sports of horseshoes, handball and shuffleboard. It includes an outdoor swimming pool and a temporary nine-hole golf course. There are temporary bleachers, an insufficient parking area, no permanent buildings, no area provided for children, and no sunken area for ice skating. There is little use made of landscaping in this plan since shrubbery is expensive and time-consuming. Instead, most available spaces are used for sport areas.

Plan II diagrams the future possibilities of the same lay-out given in Plan I. The field house is located within easy reach of both the high school and the rest of the athletic plant. Parking areas, too, are directly in line with all areas of activity. The field house, thus centrally located, is to be equipped with an area for arts and crafts, a cafeteria, a health and medical room, recreation rooms of various types, and should seat a capacity spectator crowd of 5000. In this diagram it will be noted that there is a stadium for every sport — dressing rooms, shower rooms, and equipment rooms on each area respectively — which leaves the gymnasium free for dances, school functions, civic entertainments, etc. Plans include 2000 permanent bleachers for the football field and track, 1000 bleachers for the baseball stadium, and 3000 movable bleachers to be used for both the football and baseball fields or other areas requiring them. These fields are to be used for city athletic programs as well as school athletics, though directed under school regulations. The camping area has been divided to offer facilities for children's play areas: the golf course has been moved to the unexcavated area of Plan II to allow room for the field house, bus parking area, and public parking area. On the remainder of the unexcavated area the high school building is located. The high school is equipped with an auditorium large enough to accommodate civic programs, but organized and rented under the auspices of the school administration. Additional areas have been added for golf, archery, and a rifle range. The girls' hockey and soccer field has become a sunken area for winter ice-skating.

Tennis courts next to the girls' hockey and soccer field are concrete-paved for additional parking and outdoor roller-skating use. Additional landscaping is noticeable. Location of this site along the river offers other future possibilities—fishing under the supervision of the city Conservation Club, and boating.

Present-day needs and desires make it necessary for the schools of tomorrow to be recognized as sites of recreation. Careful planning must be done to insure that school buildings and grounds are designed to serve the varied recreational needs of all ages during the entire year. Some communities already have made such provisions and have found that it is practical, and further, that it fosters a school-community relationship which is wholesome to the lives of children, youth, and adults. Although more and more is being done about utilizing schools for recreation, there is still much to be done in planning wisely for the future. It is hoped that this study has been of help in solving the problems encountered by those interested in buildings and grounds which meet the needs of school and community.

## Genoa Builds A Gym

(Continued from page 19)

the bleachers. The type of wood used in the gym floor is hard maple.

There is enough room behind each basket to seat about 200 people on temporary bleachers. The permanent concrete bleachers are a new type of construction which allows more knee room despite the fact that the seats are 12 inches wide from front to rear. This is wider than most bleacher seats.

The stage is also used for orchestra and band rehearsals and may be used as a class room through the sound-proofing arrangement made possible by the new construction. Due to the acoustical Celotex ceiling and a heavy fireproof curtain that may be drawn, orchestra rehearsals may be held on the stage while gym classes are being conducted on the gym floor. Natural lighting is provided by the windows at the rear of the stage.

In one of the dressing rooms off of the stage there are sinks and stoves so that banquets held in the gym may be conveniently serviced. A dumb-waiter goes to a larger kitchen below which serves the cafeteria.

The lobby of the gym is surfaced completely with terrazo flooring, as are the rest rooms off the lobby. There are trophy cases, a ticket office and a concession room in the lobby.





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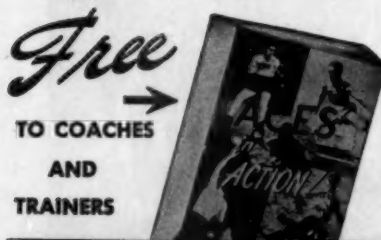
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Twin locker rooms are located below the main floor level underneath the permanent bleachers. Each locker room has accommodations and lockers for one hundred persons. Perhaps the unique feature of the locker rooms is a drying apparatus which dries gym suits and ventilates the locker room. Installed in the base of each locker is an air duct which sucks air in through ventilating slots on the door of the locker. Thus when a player hangs his suit in the locker a constant stream of air dries and ventilates it, drawing all odors out through the ducts in the base of the locker. In addition to the lockers there is a special drying room for suits.

The shower room is located off the locker room and can accommodate 12 persons at one time. The coach's office has a private shower attached to it. There is a training room across from the coach's office and an equipment room next to the training room. As an aid to cleanliness every square foot of the locker room, including walls and ceiling, may be washed. There is an outdoor entrance to the locker room so that players entering from the outside do not have to go through the gym.

On the other side of the lower level the cafeteria is located. This is situated directly below the stage and can accommodate the 125 students enrolled at the school. The janitor's storage room is adjacent to the cafeteria.

By using its old locker room facilities the Genoa Township High School can easily handle a basketball tournament. Four teams could shower and dress in individual locker rooms by making use of both the old and the new facilities.

Six gym classes are held daily in the gym at the present time. Equipment for basketball, volleyball, badminton, tennis, indoor baseball, tumbling, wrestling, boxing, movies, dramatic presentations and musical programs is available now. More equipment, including climbing ropes, rings, parallel bars, etc. will be added next year.

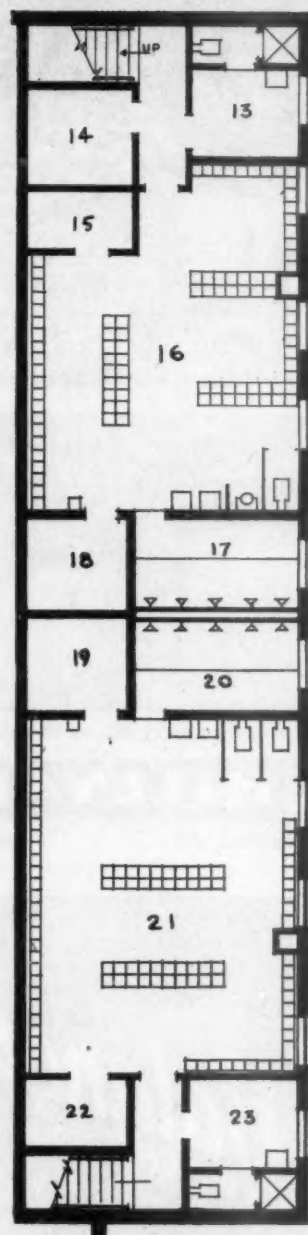
The editor wishes to express his thanks to the following for their great assistance in collecting the material for this article:

Mr. O. W. Smith, Coach at Genoa High School

Mr. Clarence L. Louderback, Principal at Genoa High School

Mr. M. G. Roberts, Faculty Member, Genoa High School

The firm of F. E. Berger, R. L. Kelley and T. E. Samuelson, Architects, Champaign and Evanston, Illinois.



Lower Level Plan

13. Instructor's office
14. Training room
15. Supply room/
16. Boy's locker room
17. Boy's shower
18. Drying room
19. Drying room
20. Girl's shower
21. Girl's locker room
22. Supply room
23. Instructor's office

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## Line Play

(Continued from page 6)

If he loses shoulder contact he should keep up the side-check block. Getting the jump on the opponent and knowing what one is going to do is half the block. The head should always be kept between the ball and the man being blocked.

## Defense

The most important factor of defensive play lies in the defensive man's ability to get the jump on his man and keep him guessing as to where he is going in. The guard should keep his feet in a rather wide stance that will give him a quick start. A three-point stance for long yardage and a four-point stance for short yardage is a good plan to follow. The tackle should always keep a three-point stance. Rule one is: After a player knows the territorial limit that his charge should be he should observe the offensive man he is to break through and look for give-away's of plays by both linemen and backs. Unless using an offensive stance similar to the one described above the opponent is most likely to have weaknesses against various charges. A player should never go in the same way twice in a row unless submarining or lining up in a different position only to come back to the same spot. He should start with the ball and lunge with the hands and arms in front of the body. Jolting the opposing man under the shoulders in an upward motion and following through with the body, (keeping it low) is a good charge. If the opposing man's head and eyes are downward a player should help him along by batting them down further. If splitting two men, an all-out effort should be made on one of the men first. A player should not float and leave his hole open for cut-backs. Throwing feints that will not affect one's charge is good. Throwing the arm or head in one direction will cause the blocker to fail to make a solid contact. The defensive lineman should watch out for traps. If allowed to go in he should get low and look for the trapper or screen pass. He should always charge low so as to give the blocker a smaller target to hit. The charge should be varied. The opponents' weaknesses should be observed and then worked on.

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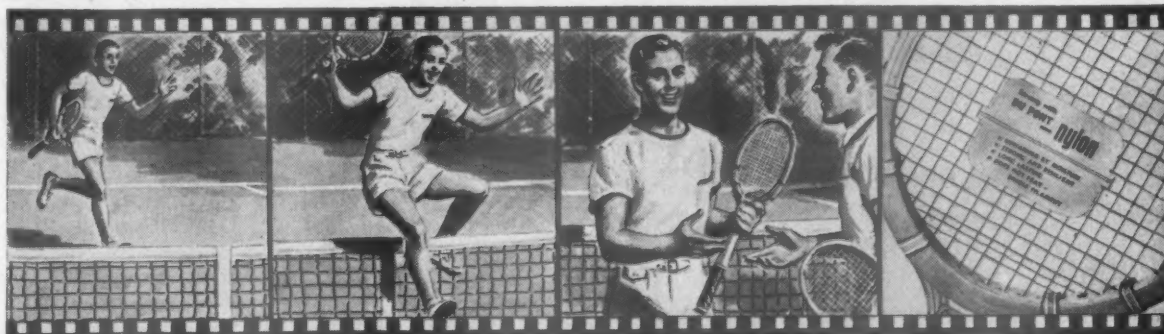
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## Teaching the Lineman

(Continued from page 9)

a sound comfortable position from which to operate is handicapped from the very start. An unorthodox or improper stance will make the execution of other fundamentals more difficult.

In working with raw, inexperienced linemen, we teach them our technique by lining them up on a straight line and having the individuals spread their legs until their feet are on a line with their hips. We then have them square to a comfortable position with the head high and tail low. Only the barest of fundamentals are taught — the stance, the shoulder block, body block, pulling out, one on one, and two-on-one blocking.

## Stance

The three point or tripod stance is used at Lincoln Park and we check stances and work with individuals from the start to the close of the season.

The essential requisites of a good stance are: head up, rigid neck (bull neck), back straight, buttocks low, toes pointed straight ahead, heels pointed up, the free arm resting on the knee and the hand on the ground resting on the first and second row of knuckles. After emphasizing these we allow each candidate to assume his stance in front of a full-length mirror on which is posted a list of requisites of a good stance. This practice allows the individual to take inventory of himself in relation to his faults (Illustration 1). Assuming that the individual has acquired a stance that enables him to move forward, backward, and laterally and is able to uncoil his legs with comfort and power, we begin by teaching the charge on all fours for two days, to build up the charge on the feet.

We strive to develop quickness in our linemen's charge or lunge. Every drill or exercise that we use is designed with this aim in mind. With a body duck we like an explosive charge, propelling forward or to either side with head up, bull neck, and feet apart, contacting the target with the shoulder, neck, and side of the head and sustaining the charge with a drive straight back or to either side. After pointing out to the individual that the charge involves combining the uncoil, the body-duck to get under the opponent, the contact and the follow-through into one complete motion, the candidate is put on



## NEW BOOKS

**How To Win At Tennis**, by Jack Kramer. Published by Ziff-Davis Publishing Company. Chicago. New York. Los Angeles. One hundred eighty-two pages. \$3.00.

The author is, of course, the world's professional champion. This is his book on the technique of the game. All of the fundamentals are covered thoroughly and clearly illustrated through excellent photographs. Especially good are the pages devoted to footwork and leg position — a phase of the game which is often slighted.

In addition to the basic strokes there are chapters on the story of tennis, doubles, court strategy, temperament and practice. Part two of the book has these chapters: Champions of Tomorrow, The Court and Practice Board, Clinics and Tournaments, Kramer Speaking.

Every tennis player will want to read this book. Even the non-playing enthusiast will enjoy reading this book on the great court game by the greatest exponent of the sport.

**The Organization and Administration of Intramural Sports**, by Louis E. Means. Published by the C. V. Mosby Company. St. Louis. Four hundred forty-two pages. Illustrated. \$5.75.

This is a most exhaustive study of intramural sports. Every conceivable phase of the subject is considered. From the historical background and the philosophy of intramural sports to the motivation and promotion of the program, the author has gathered a wealth of information.

This is a partial list of the chapter headings: Administrative Problems and Responsibilities, Organization of Units for Competition, Planning Time for Intramurals, Point Systems: Group and Individual Scoring, Intramural Rules and Regulations, The Program for Girls and Women, Financing the Program, Expanding the Outdoor Program, Community Relationships and Participation.

This book contains information relative to any age group and for any season. Its philosophy is "sports for all" and it is dedicated to the principle that "no student should be deprived of his or her opportunity for participation in a great variety of recreational experiences which may

contribute more than we know to a long and happy and normal life."

**The Handbook of Day-Camping**, by Mabel Lyon Jobe. Published by Association Press. New York. One hundred eighty-nine pages. \$3.00.

This book will serve as a guide for anyone who plans to start a day-camp or who is already directing one. It contains information on every phase of the project.

The opening chapter explains exactly what a day-camp is and what values it has. Chapters 2 and 3 discuss the selection of a camp setting, the elements of transportation, food service, facilities, etc. and selecting the staff.

Subsequent chapters are devoted to training the staff, the role of the counselor, health and safety measures, planning the camp program, the elements of nature study, suggested creative activities, and physical activities.

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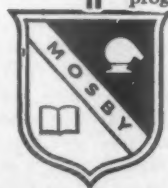
In a modern world all too full of maladjustments, inhibitions, complexes, worries, and fears, youth will profit tremendously from a training and an experience that uses pleasurable activity to teach one how to relax—how to get along with other people—a respect for the opposite sex—and wholesome skills that are never quite lost, to be called upon again and again to relieve the adult tensions and worries of society.

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of trained leadership which can make Democracy in Sports a reality.

This book presents the background of INTRAMURAL SPORTS—present practices and ideas that are workable and effective—and implications for future planning. Practical suggestions are included from all kinds of schools from every part of the nation and Canada.

It is dedicated to the principle that no student should be deprived of his or her opportunity for participation in a great variety of recreational experiences which may contribute more than we know to a long and happy and normal life. It will be of immeasurable assistance to the thousands of educators who are seeking to develop the finest program possible for all students.



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a 'blockback' dummy with the holder offering passive resistance (Illustration 2).

We urge the lineman to keep his eyes on his opponent and to brush his ears on the target on contact. The faults of the inexperienced beginner are: his initial steps are too long, his feet are too close together, the head is down and tail is up, and the body is not squared on the target. Youngsters will often duck the head, flinch, and close the eyes on contact.

We like our offensive lineman to take advantage of his starting signal and beat his opponent to the charge with all the power at his command.

**ARCH STEEL** graduated from Bowling Green University in Ohio and took his M.A. at the University of Michigan. He became football and basketball coach at Lincoln Park in 1940. During the war he served as a boxing instructor and athletic officer in the navy. His football team won the conference championship last year. An article by Mr. Steel entitled "Pre-Season Organization for High School Football" appeared in the May issue.

Considerable time is required to teach quickness and speed in the shoulder charge and its execution must be practiced constantly. We have found that linemen learn the shoulder charge more quickly if we line them up in front of blockback dummies and charge on the half count before the snap. This has developed a quickness in uncoiling in our linemen (Illustration 3).

Progress in the shoulder charge is followed by two-on-one blocking on player-supported dummies, first using the straight-back charge in which both offensive blockers are taught to start with their left foot. While the boys are contacting the dummies, they are moving them forward through the use of short, choppy steps. As progress is made on the fundamental straight-ahead-charge, the offensive linemen are drilled on taking their target laterally to the right, in which case they both start with the left foot. This drill is continued until the offensive team can handle the defensive target to the left in which both chargers start with the right foot.

Once a boy has progressed satisfactorily on his two-on-one straight-ahead and lateral blocking, we start on "step-out" blocking to cope with over- and undershifted "head-on-head" defensive men. We employ the blockback dummy and have him practice material steps at a 45-degree angle, providing him with a blocking angle sufficient to carry out his assignment. If the blocker is to take

his target to the right he steps to the left on his initial charge, giving him a blocking angle to charge his opponent. The player is taught to step in the opposite direction he is assigned to take his target, his step-out affording him an angle to execute his shoulder charge. To further develop quickness we have the linemen take one yard, head-on charges with the Crowther sled along with drills on the four-man charging machine on the snap of the ball. This drill aids considerably in developing quickness and power in the charge.

### Pulling Out

In pulling out of the line we endeavor to teach the individual to get away quickly without telegraphing his movements and to move with his body under control. In this the initial movement out of the line and getting underway should be one complete movement. We use the pivot type of pull-out in preference to the crossover type. We have found that the pivot is more practical because of the elimination of having to have inexperienced linemen hold off the opposition until the pulling guard leaves his post. Linemen assigned to pulling-out positions are drilled in front of the full-length mirror where they can detect their faults.

Close attention to the minute detail in the lineman's fundamentals demands patience and endurance, but such virtues will be rewarded by the development of alert, aggressive, and sound linemen.

### Coos Bay Athletic Stadium

(Continued from page 14)

with lavatories, toilets, and drinking fountains.

To gain a seat in the stands, one has to ascend to the level in back of the seating and go down to the seat desired. All standing room is behind, thus there is no obstruction for those seated. A specially designed bandstand is built in the student section with a raised stand for the director.

Atop the south stand, at a height of 42 feet, a "press box" was built the entire length of the stand, which provides two rows of seats and standing room behind. In the center is the working press arrangement, partitioned off from the spectators and adjoining the glassed-in radio booth. These "press box" seats are the delight of the veteran fan who, for the first time, can see "everything" that happens. There is not a single obstruction of any kind in front of the

fan seated in this section.

In all phases of the planning, experts were consulted on their specialties so that the most satisfactory results could be obtained. Other grandstands were checked, so that the best features could be incorporated and the faults eliminated. Sports writers checked on press box plans; coaches on player accommodations; radio men on the radio booth; merchandising experts on concession booths; band directors on band accommodations, and school officials on the over-all situation.

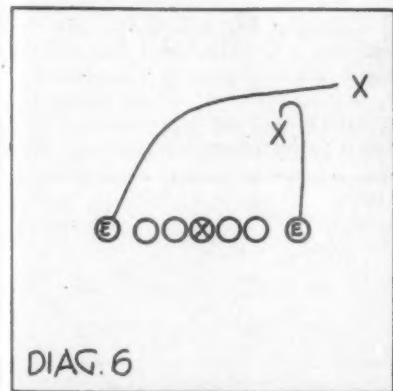
The final result is an athletic stadium built for the people of Coos Bay by the people of Coos Bay. Community pride in their stadium is justified as it is the finest high school stadium in the state.

## Building A Pass Pattern

(Continued from page 12)

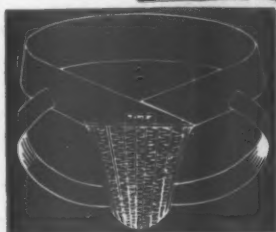
hook pass. One is a stop-and-go pass. Two and three are flat passes. Four and five are swerve or banana passes. Six and seven are down-and-out or down-and-in passes. Eight and nine are down and diagonally out or in passes. Four B and five B are the same pattern as four and five except they cut back in the opposite direction (Diagram 5).

If it is desired to have only one end go out as a pass-receiver, the play would be called pass right end 6, or pass left end 5 B. With two ends out the first digit of the number refers to the left end and the second digit refers to the right end. Calling a pass 4 O means the left end runs a four pattern and the right end a zero pattern (Diagram 6).



Pass 4 B 1, is the left end running the 4B pattern and the right end runs the one pattern (Diagram 7).

The backs run the same patterns as the ends, however, they may be in motion or go straight into the line



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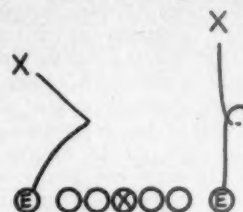
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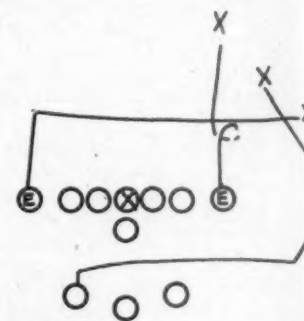
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DIAG. 7

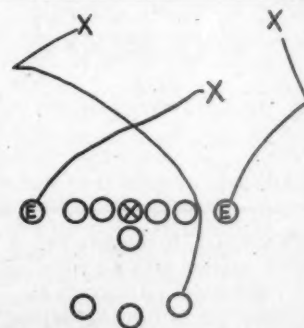
and then run the pattern after they get through the line. Using the ten's as the quarterback, twenties as the left half, thirties as the fullback, and forties as the right half, the second digit classifies the pattern to run. Therefore, calling a pass 61 left half in motion 29, means the left end runs a 6, the right end a 1, and the left half is in motion and runs a 9 pattern (Diagram 8).



DIAG. 8

Calling a 44B-45B is the left end running a 4, right end a 4B, and the right half a 5B pattern (Diagram 9).

In this style of calling passes the quarterback must be versatile in calling a pattern that will move his men



DIAG. 9

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into the open areas against the defense.

Passing against a team using a zone defense the quarterback can readily call plays overloading the zones by sending three or even four men into one zone. Against a man-for-man defense the quarterback can call pass patterns that will cross.

In the T formation the quarterback is usually both the passer and signal caller. As he calls the play and does the passing he is in perfect position to know how the defense is covering the pattern. He can readily see where the open man will be and call his next plays accordingly. After calling a pass pattern the quarterback might see a better opening to put one of the receivers into; therefore all that is needed is to change the pattern of one player. Perhaps one receiver is open until another receiver comes into his path or crosses it. The quarterback may readily correct this by sending the player who is bottling the play up in a different pattern.

For this technique of calling pass plays the quarterback must learn the patterns and know them thoroughly. After he has mastered the patterns he will have more or less definite patterns to work from. The chief aim is to be able to get the men into the open and with ingenuity the quarterback can manipulate his tactics and develop his strategy as the defense begins to cover the pass patterns.

The variations of patterns depends chiefly on the number of men that can be sent out, and still give adequate protection to the passer. Combining the patterns of the ends there are one hundred and forty-four variations. Sending four men out could produce variations of over ten thousand patterns.

There is no purpose in having a system of signals which merely produces more plays, but there is purpose in having enough plays to meet various defenses. Of the ten thousand pass patterns possible a team probably will not use more than ten in one game.

## Six-Man At Chester

(Continued from page 16)

hour practice sessions," stated Coach Schleifer. He describes his practice work as follows:

Twenty minutes of general calisthenics are given daily to provide over-all conditioning. This schedule is kept during the first half of the season and then cut down to ten minutes during the final half. All

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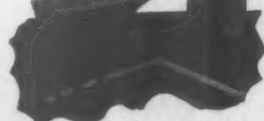
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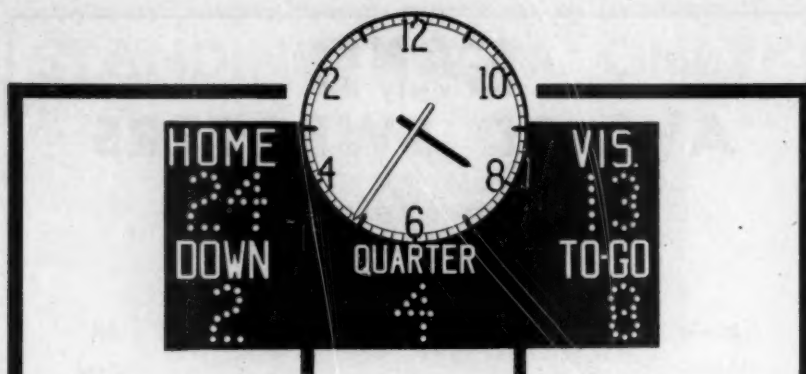
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exercises are given on a rhythm-count basis, and the boys seem to enjoy perfecting the rhythm to such an extent that calisthenics are not a drudgery. An element of competition is brought in wherever possible. For example, we have endurance contests in push-ups and then try to increase the number we do by one each day until we reach our goal (usually about twenty-five).

To develop speed and endurance we have wind sprints varying from a ten-yard charge to the full length of the field. Emphasis in these sprints is always placed on proper stance, a snap start and a low initial charge. Frequently we divide the squad into groups of eight according to speed and in this way the element of competition is considerably stronger. We also group them according to position, such as ends, center and backs, thus stimulating competition.

Our passing drills are patterned in such a way that they conform with our basic pass plays. Here special emphasis is given to the development of deception of our pass-receivers who are jockeying for position. This will include button-hooks, change of pace, sharp cutting and the like. Passing drills are emphasized in practices when we have no scrimmage. The light workouts before games are split up so as to provide for ten minutes of calisthenics, thirty minutes of passing drills and thirty minutes of signal practice.

Blocking and tackling drills receive daily attention except for the sessions held on the day before a game. During the first two weeks of practice we use dummies in drills in order to teach fundamentals of blocking and tackling. We do this so that the inexperienced squad members will not develop an injury complex, which is very difficult to overcome. In these drills we work on tackling, downfield blocking situations, two-on-one blocking and individual blocking. After the first two weeks we divide the squad (twenty-two boys) into three groups according to experience, ability, and size and then switch to live blocking and tackling in which a man is substituted for a dummy. We then use the same blocking and tackling drills as before, but we move through them at one-quarter speed. This cuts down on injuries and gives the boys a chance to master the proper holds, twists, follow-through's, and falls that develop good tacklers. When blocking at one-quarter speed it is easier to learn the blocking angles, follow-



through's, and blocking areas (where to hit your man). As soon as the boys have mastered these skills, the speed of charge is increased to one-half, three-fourths, and full speed. This tempo change has to be gradual to be effective. Full speed contact should be very limited. We switch the live dummies quite often and use mostly backfield men. In live tackling-practice we give them a ball and it affords them training in stiff-arming, side-stepping, and falling or rolling with a tackle at the same time. In the live blocking-drills we use a ball-carrier and blocker. This again gives the backfield man practice in following his blocker. Then if the blocker misses his man, tackling may once again be practiced.

Scrimmage sessions are held for about an hour twice a week. We have thirty minutes of dummy scrimmage and dummy signal drill daily after the first week of practice. Here, too, we use the half-speed system to teach assignments and to perfect timing and co-ordination.

After daily practice, individual attention and instruction are given to centers, punters, passers and place-and drop-kickers. In this way the entire squad can be under the supervision of one coach.

## Planning Football Season

(Continued from page 26)

sively and offensively. That old adage that you can score a million points but if they score a million and one they still win holds true and will continue to do so.

Certain basic principles should be followed in setting up defenses. One of the most important along this line is to make sure you are well fortified from tackle to tackle. In a six-man line the policy is to set men on every other offensive man from tackle to tackle. That is basic and variations for a six-man line should be made from there. Diagrams 1, 2 and 3 show a defensive line set-up against a T formation, a single wing and a double wing. Note the principle of every other man from tackle to tackle.

As far as delegating responsibility, we like the idea Coach Paul Brown has. He gives the man a two-thirds responsibility with the other third being to go after the ball once the play develops. For example, he might give an end an outside responsibility. That is two-thirds of his job — the other third is to go after the ball when the play develops.

## A GREAT NAME IN FOOTBALL

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One of the most amazing successions of football teams ever put together were Fielding H. ("Hurry-Up") Yost's University of Michigan elevens of 1901 through 1905. In that five year span, Michigan won 55 games, tied one, and finally lost one in 1905 — to Chicago by 2-0 on a safety. They scored a total of 2821 points to their opponents 40.

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**T**HE LATEST in football shoe cleats is the new "heavy-duty, semi-soft" cleat developed by the Brooks Shoe Manufacturing Company, Philadelphia, Pennsylvania. This cleat was created as a result of the emphasis now being placed on safety features in athletic equipment. Tests indicate that the new cleat, which is made from a special compound, will not crack or split with a sharp edge. The Brooks football shoes will be equipped with this new cleat which will be used in conjunction with the company's famous Lock-Tite cleat bolt assembly.

**A** SHOE PAINT that eliminates greasing and soiling of leather athletic shoes is the innovation shown here. Called "Shoe-Nu", the paint is a black plastic leather material substance which dries in 15 minutes and makes old shoes look like new. Tested by Howie Odell and others, Shoe-Nu waterproofs and protects leather and is recommended for use on the soles as well as the tops of leather shoes. It wears like iron and yet is flexible. It will take the strongest acid eight days to penetrate a coating of Shoe-Nu. Price: \$4.95 per quart, \$14.95 per gallon. If your dealer cannot supply, write to Olympic Trainer Company, Inc., P. O. Box 707, Tacoma, Washington.



**A** NEW TRACK shoe known as the "195 Special" is shown at the left. One item in the new University line of track shoes manufactured by the George Gillis Shoe Corporation of Fitchburg, Massachusetts, it is the finest top quality shoe suitable for any competition. This shoe has only four spikes and a shorter forepart sole for easier bending closer to the ball of the foot. It also has a patented tongue. The entire University line of sprint shoes are more narrow in the instep and heel than the other styles since they are for footwork entirely on the ball of the foot. This eliminates the chance of the sprinter's heel coming out of the shoe. The shoe has a cushion heel and detachable spikes. Price: \$6.45.

It seems to us that more team responsibility is being given than ever before. This is borne out in play against the T formation where a weak spot may be hit easily and quickly. Here there is tremendous pressure on all men to work as a unit.

The best guiding principle we have heard in connection with building a special defense is to *meet strength with strength and let the weakness take care of itself.*

One of the hardest types of defense is pass defense and the coach who does not plan it well will find many hardships ahead. In order to help put this across a coach may have the basketball coach assist for many of the principles involved in playing a man in basketball hold true for football.

Team defenses should be practiced as a unit not merely drawn up and explained once or twice.

### From Here and There

(Continued from page 4)

... Mario "Mike" De Fazio is head coach of football at Needham, Massachusetts, High School. He is a graduate of Boston University and has been coaching the Needham Junior High team ... Steve Sebo, athletic director and head football coach at Alma College has been named backfield coach at Harvard to succeed Dave Nelson who resigned to accept the head football coaching berth at the University of Maine. Nelson has named Harold Westerman and Mila Lude as his assistants; both come from Hillsdale College where they served as backfield coach and line coach respectively ... Vince Davis, Notre Dame graduate and coach at Lock Haven, Pennsylvania, High School for the past ten years, has been appointed head football coach at St. Francis College in Loretto, Pennsylvania ... After five years as head football coach at the University of North Dakota, Glenn Jarrett will become athletic director. Richard Miller, who has been line coach at the University of Oregon will assume the position of head coach and will bring Frank Zazuma, backfield coach at Oregon, with him as his assistant.

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## Athletics Comes of Age

(Continued from page 20)

trunk supporting the fabulous names of Jones, Dempsey, Ruth, et al., it has developed a root system that touches every community. Yes, as we have so long maintained, high school athletics is the foundation of the country's entire athletic program. High school athletics is responsible for this growing up of athletics.

## Tax on Athletics

RECENTLY the Commissioner of Internal Revenue ruled that it is not necessary for public high schools to pay the excise tax on sporting goods purchased for school use.

This is certainly a move in the right direction. We feel that the excise tax on all sporting goods should be removed. It seems incongruous to us that our federal government should spend the many millions that it is for building recreational facilities and then hamper the program by taxing the equipment necessary to make these facilities usable.

The sporting goods industry pays its normal share of taxes and then is forced to carry the burden of additional excise taxes. Most of the other items which have excise taxes are items used by adults. We refer to the jewelry, cosmetic and luggage excise taxes. On the other hand, the largest number of users of sporting goods are youth.

As we pointed out a year ago in an editorial on admission taxes for athletic contests, the youth of the country will soon reach the age where they will be paying taxes the rest of their lives. They should at least be given a few years respite from taxation. Admission taxes for students at athletic contests and excise taxes on sporting goods, the largest single users of which are youth, should be abolished if the old Revolutionary War cry of "taxation without representation" still means anything.

## A New Feature

COMMENCING with September we will carry a column devoted exclusively to humorous stories concerning sport and sport celebrities. We feel that this will be an invaluable aid to coaches who are called on for public speaking. We will pay \$5.00 for each story used.

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